



CITY COUNCIL

~ AGENDA ~

SPECIAL MEETING

312 S. Mildred Street
Ranson, WV 25438
www.cityofransonwv.net

Tuesday, June 23, 2020

7:00 PM

Zoom

INSTRUCTIONS TO JOIN ZOOM MEETING

To remotely attend this meeting please register by going to page 10 of this agenda packet and click the link "HERE." After registering to attend, instructions to join the meeting will be e-mailed to you.

I. CALL TO ORDER

II. APPROVAL OF MINUTES

1. City Council - Regular Meeting - Jun 16, 2020 7:00 PM

III. CITY MANAGER/STAFF REPORTS

IV. COMMUNICATIONS FROM THE MAYOR

V. COUNCIL BUSINESS

1. Ordinance #2017-302 - 2nd READING and PUBLIC HEARING of an Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: "Jefferson Orchards" Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1)

VI. ADJOURNMENT



CITY COUNCIL

~ MINUTES ~

REGULAR MEETING

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www.cityofransonwv.net

Tuesday, June 16, 2020

7:00 PM

Zoom

INSTRUCTIONS TO JOIN ZOOM MEETING

To remotely attend this meeting please register by going to page 21 of this agenda packet and click the link "HERE." After registering to attend, instructions to join the meeting will be e-mailed to you.

I. CALL TO ORDER

The meeting was called to order at 7:00 PM by Mayor Keith D. Pierson

Attendee Name	Title	Status	Arrived
Mike Anderson	Third Ward Council	Present	
David Cheshire	At-Large Council	Present	
Scott Coulter	First Ward Council	Present	
Donnie Haines	Second Ward Council	Present	
Keith D. Pierson	Mayor	Present	
Gene Taylor	At-Large Council	Present	
Amanda Stroud	At-Large Council	Present	
Tony Grant	City Manager	Present	
Robbie Roberts	Chief of Police	Absent	
Stacey Pfaltzgraff	City Clerk	Present	
Edward Erfurt	Asst. City Manager	Present	
Lori Nice	Finance Director	Present	
Bill Silveous	Public Works Director	Absent	
Debbie McClure	CVB Director	Present	

II. APPROVAL OF MINUTES

1. City Council - Regular Meeting - Jun 2, 2020 7:00 PM

RESULT:	ACCEPTED [UNANIMOUS]
AYES:	Anderson, Cheshire, Coulter, Haines, Pierson, Taylor, Stroud

III. CITIZEN'S PRESENTATIONS/PETITIONS

IV. CITY MANAGER/STAFF REPORTS

City Manager's Report – City Manager Tony Grant – City Manager Grant provided the following updates to Council: Staff is continuing to process paper

work for the COVID-19 CARES Act; all written comments and requests to speak for the June 23, 2020, Public Hearing must be submitted to the City Clerk by 5:00 pm, Thursday, June 18, 2020.

V. COMMUNICATIONS FROM THE MAYOR

1. Letter of appreciation – Mini Grant – Children’s Home Society of West Virginia
2. Letter of appreciation – Mini Grant – Renewed Life Ministry
3. Letter of appreciation – Mini Grant – JCCOA
4. Letter of appreciation – American Red Cross Blood Drive – The Roman Catholic Parish of Saint James the Greater
5. Certificate of recognition – Ranson 5th Avenue Connector – Governor Jim Justice
6. Certificate of appreciation – Kevin Gaghan
7. Certificate of appreciation – Potomac Elite
8. Two new police officers will take their Oaths of Office July 7, 2020

VI. COUNCIL BUSINESS

1. Ordinance #2017-302 - 1st READING of an Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: "Jefferson Orchards" Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1)

City Attorney Tim Stranko provided the following overview to Council: Before Council on first reading tonight is a petition by a Landowner to amend the zoning code regarding property owned solely by that Landowner (Jefferson Orchard Map 12, Parcel 1). This petition has been endorsed by public act of the Ranson Planning Commission, with a finding that the Landowner’s proposed amendment is consistent with the 2012 Ranson Comprehensive Plan. Council previously enacted this zoning code amendment at Ordinance # 2017-302.

Recently, the Jefferson County Circuit Court observed that the City had not adequately advertised this ordinance prior to enactment (the City published one legal ad instead of two legal ads). To correct this administrative error, the City has re-advertised this ordinance with two legal ads and again brings this ordinance to Council as requested by the Landowner.

As with every question put to this body, Council must and may only act consistent with the law. In this case, Council is constrained by West Virginia law to consider the requested zoning map amendments on land use merits alone. Because Ranson has adopted a comprehensive plan, the question before Council is: **“Whether the proposed “amendment is consistent with the adopted comprehensive plan.” W.Va. Code 8A-7-9**

The 2012 Ranson Comprehensive Plan was adopted after months of public and stakeholder engagement during “Ranson Renewed.” Ranson Renewed also included a weeklong series of public engagement sessions designed to incorporate the needs of the community into the Comprehensive Plan.

As required by law, the 2012 Comprehensive Plan Outlines the General Land Use Objectives, including Objective #10:

“Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (*Ranson, West Virginia Comprehensive Plan 2012, Page 31*)”

The 2012 Plan identifies Jefferson Orchards as a prospective major development project:

“Jefferson Orchard. A proposed relocation of the Duffields MARC station and development of a Transit Oriented Development in an intended growth urban area. This area is also proposed for Special Industrial District that would utilize the rail access. (*Ranson, West Virginia Comprehensive Plan 2012, Page 30 & Appendix B*)

For these reasons, your Staff agrees with the Planning Commission finding that the proposed zoning map amendment is consistent with the 2012 Comprehensive Plan.

Staff acknowledges the many concerns shared by our Citizens regarding the proposed zoning amendment. However, the City must act consistent with, and as constrained by, the law. If Council rejects the proposed amendment as inconsistent with the 2012 Comprehensive Plan, it must find and state relevant facts supporting that conclusion.

A contrary relevant fact supporting rejection would be any showing that the proposed amendment is not consistent with the 2012 Comprehensive Plan. Facts or allegations that Council may not rely upon to reject the proposed amendment include:

- 1) *Air or Water environmental concerns*: These matters are wholly governed and regulated by the Federal Clean Air and Clean Water Acts, as administered by USEPA and WVDEP. The City has no authority to regulate in these areas. This means that Council may not make findings of fact or law contrary to those made by state and federal regulators or the agencies and courts overseeing those regulators.
- 2) *Objection to comprehensive plan*: The 2012 Comprehensive Plan is the legal foundation document for City planning and zoning – everything the City does must be consistent with the enacted plan (*West Virginia Code Chapter 8A*,

Article 3). Post-adoption amendments to the comprehensive plan are governed by this Code chapter (WV Code 8A-3-11).

City Manager Tony Grant provided a visual overview of the Jefferson Orchards Chapter 19A Rezoning Request. City Attorney Tim Stranko concluded with comments about citizenship and equal protection under the law, as well as, landowner’s vested rights.

RESULT:	APPROVED [6 TO 1]
MOVER:	Donnie Haines, Second Ward Council
SECONDER:	David Cheshire, At-Large Council
AYES:	Anderson, Cheshire, Coulter, Haines, Pierson, Taylor
NAYS:	Amanda Stroud

- 2. Resolution #2020-22 - A Resolution of the City Council of Ranson, West Virginia Approving the Scheduled Date of June 23, 2020, for the 2nd READING and PUBLIC HEARING for Ordinance #2017-302 - An Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: "Jefferson Orchards" Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1)

In accordance with W. Va. Code§ 8A-7-8 et seq., and W. Va. Code §8A-7-9 et seq., and Ranson Code §19-20 et seq., the Ranson City Council will consider proposed Ordinance #2017-302. The first reading of this proposed Ordinance was held Tuesday, June 16, 2020. The second reading and public hearing of this proposed Ordinance was scheduled for Tuesday, June 23, 2020.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Amanda Stroud, At-Large Council
SECONDER:	Scott Coulter, First Ward Council
AYES:	Anderson, Cheshire, Coulter, Haines, Pierson, Taylor, Stroud

- 3. Resolution #2020-23 - A Resolution of the City Council of Ranson, West Virginia Approving and Authorizing the Chief of Police to Execute General Order #20-22 Chemical Agents

Pursuant to the Ranson Civil Service Rules and W. Va. Code §8-14-10 (1), General Order #20-22 - Chemical Agents, which replaces the existing General Order, is hereby approved and the Chief of Police is authorized to execute the same.

Minutes Acceptance: Minutes of Jun 16, 2020 7:00 PM (APPROVAL OF MINUTES)

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Donnie Haines, Second Ward Council
SECONDER:	Mike Anderson, Third Ward Council
AYES:	Anderson, Cheshire, Coulter, Haines, Pierson, Taylor, Stroud

4. Financial Reports - May

Finance Director Lori Nice provided the Fiscal Year 2020 Financial Reports for May. 1. Capital Improvement Fund Report; 2. General Fund Report; and 3. Accounts Payable Report

5. Jefferson Orchards Chapter 19A Rezoning Request Attachment

VII. ADJOURNMENT

Motion was made by Council Member Haines to adjourn. Motion was seconded by Council Member Taylor. Motion carried unanimously. Council has scheduled a Special Meeting via Zoom for Tuesday, June 23, 2020, at 7:00 pm.

The meeting was closed at 7:25 PM

 Keith D. Pierson
 Mayor

 Stacey A. Pfaltzgraff
 City Clerk

Minutes Acceptance: Minutes of Jun 16, 2020 7:00 PM (APPROVAL OF MINUTES)



City Council Request For Council Action

TO: Mayor and Council

FROM: Tony Grant, City Manager

SUBJECT: Ordinance #2017-302 - 2nd READING and PUBLIC HEARING of an Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: "Jefferson Orchards" Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1)

Before Council on first reading tonight is a petition by a Landowner to amend the zoning code regarding property owned solely by that Landowner (Jefferson Orchard Map 12, Parcel 1). This petition has been endorsed by public act of the Ranson Planning Commission, with a finding that the Landowner's proposed amendment is consistent with the 2012 Ranson Comprehensive Plan. Council previously enacted this zoning code amendment at Ordinance # 2017-302.

Recently, the Jefferson County Circuit Court observed that the City had not adequately advertised this ordinance prior to enactment (the City published one legal ad instead of two legal ads). To correct this administrative error, the City has re-advertised this ordinance with two legal ads and again brings this ordinance to Council as requested by the Landowner.

As with every question put to this body, Council must and may only act consistent with the law. In this case, Council is constrained by West Virginia law to consider the requested zoning map amendments on land use merits alone. Because Ranson has adopted a comprehensive plan, the question before Council is: **"Whether the proposed amendment is consistent with the adopted comprehensive plan."** W.Va. Code 8A-7-9

The 2012 Ranson Comprehensive Plan was adopted after months of public and stakeholder engagement during "Ranson Renewed." Ranson Renewed also included a weeklong series of public engagement sessions designed to incorporate the needs of the community into the Comprehensive Plan.

As required by law, the 2012 Comprehensive Plan Outlines the General Land Use Objectives, including Objective #10:

"Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (*Ranson, West Virginia Comprehensive Plan 2012, Page 31*)"

The 2012 Plan identifies Jefferson Orchards as a prospective major development

project:

“Jefferson Orchard. A proposed relocation of the Duffields MARC station and development of a Transit Oriented Development in an intended growth urban area. This area is also proposed for Special Industrial District that would utilize the rail access. (*Ranson, West Virginia Comprehensive Plan 2012, Page 30 & Appendix B*)

For these reasons, your Staff agrees with the Planning Commission finding that the proposed zoning map amendment is consistent with the 2012 Comprehensive Plan.

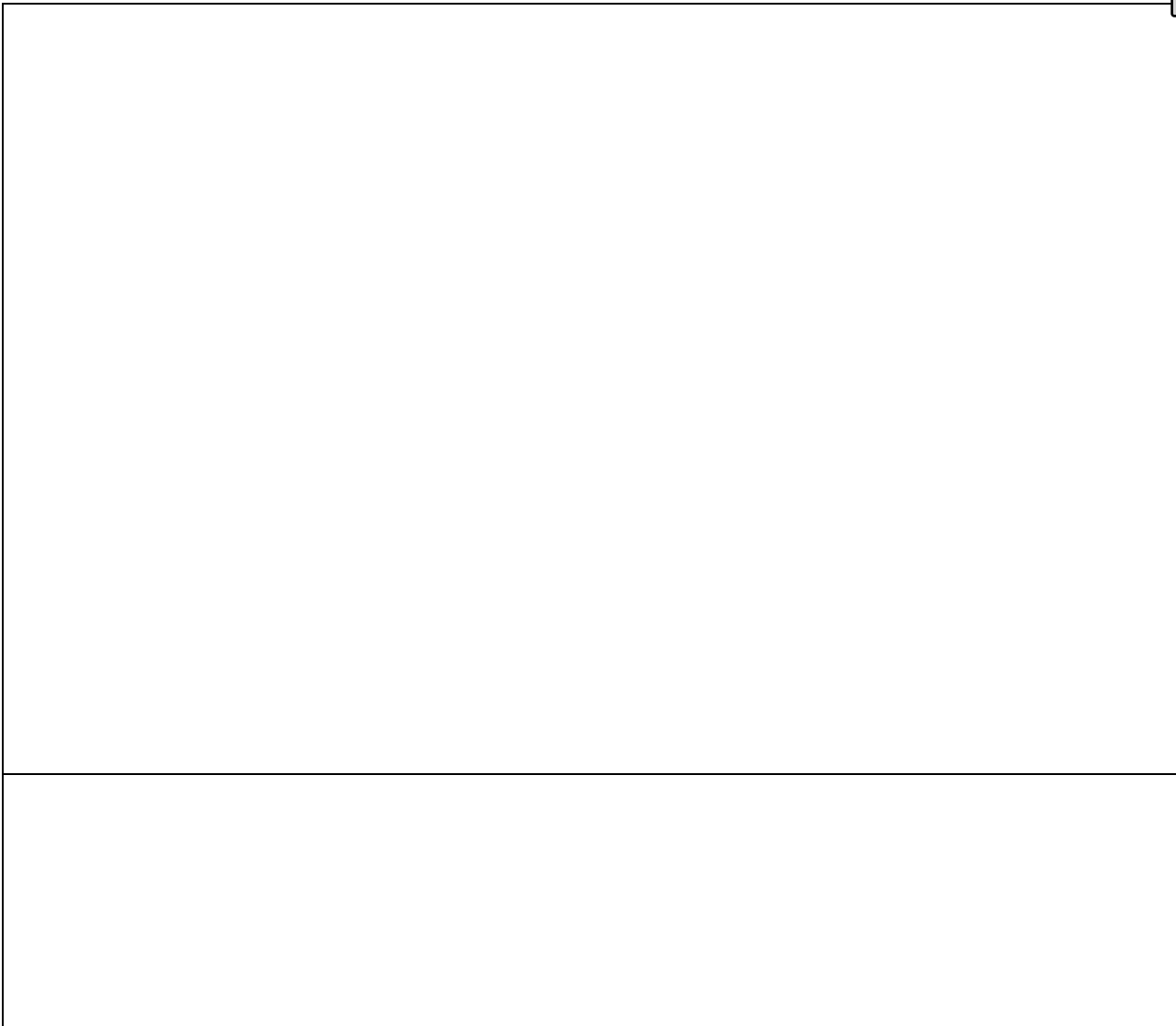
Staff acknowledges the many concerns shared by our Citizens regarding the proposed zoning amendment. However, the City must act consistent with, and as constrained by, the law. If Council rejects the proposed amendment as inconsistent with the 2012 Comprehensive Plan, it must find and state relevant facts supporting that conclusion.

A contrary relevant fact supporting rejection would be any showing that the proposed amendment is not consistent with the 2012 Comprehensive Plan. Facts or allegations that Council may not rely upon to reject the proposed amendment include:

- 1) *Air or Water environmental concerns:* These matters are wholly governed and regulated by the Federal Clean Air and Clean Water Acts, as administered by USEPA and WVDEP. The City has no authority to regulate in these areas. This means that Council may not make findings of fact or law contrary to those made by state and federal regulators or the agencies and courts overseeing those regulators.
- 2) *Objection to comprehensive plan:* The 2012 Comprehensive Plan is the legal foundation document for City planning and zoning – everything the City does must be consistent with the enacted plan (*West Virginia Code Chapter 8A, Article 3*). Post-adoption amendments to the comprehensive plan are governed by this Code chapter (*WV Code 8A-3-11*).

Attachments:

1. **20200616 - CM - Ordinance #2017-302 - Jeff Orchards Rezoning**
2. **20200616 - Jeff Orchards Chap 19A Rezoning Req**
3. **20200623 - Written Comments - Packet #1**
4. **20200623 - Written Comments - Packet #2**
5. **20200623 - Written Comments - Packet #3**
6. **20200623 - Written Comments - Packet #4**
7. **20200623 - Written Comments - Packet #5**
8. **20200623 - Written Comments - Packet #6**
9. **20200623 - Written Comments - Packet #7**
10. **20200623 - Written Comments - Packet #8**
11. **20200623 - Written Comments - Packet #9**
12. **20200623 - Written Comments - Packet #10**
13. **20200623 - Written Comments - Packet #11**
14. **20200623 - Written Comments - Packet #12**
15. **20200623 - Written Comments - Packet #13**



PUBLIC NOTICE

In accordance with W. Va. Code § 8A-7-8 et seq., and W. Va. Code § 8A-7-9 et seq., and Ranson Code § 19-20 et seq., the Ranson City Council will consider Proposed Ordinance #2017-302: “AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: ‘JEFFERSON ORCHARDS’ REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)”

First reading of this Proposed Ordinance will be conducted Tuesday, June 16, 2020. In accordance with the COVID-19 Emergency Declaration, this meeting will be conducted by remote means only. Public can attend by clicking [HERE](#) to [REGISTER](#). The full registration link is: <https://us02web.zoom.us/meeting/register/tZMofu-urzkvGNw8Imsbi-3jLm7qF28Ct2iS>

After registering information to connect to this meeting will be e-mailed to you.

The public hearing and second reading of the Proposed Ordinance will be conducted Tuesday, June 23, 2020. In accordance with the COVID-19 Emergency Declaration, this meeting will be conducted by remote means only. Public can attend by clicking [HERE](#) to [REGISTER](#). The full registration link is: <https://us02web.zoom.us/meeting/register/tZwkf-GrpjMjE9wdey2f5IO5E55hMpZZexaP>

After registering information to connect to this meeting will be e-mailed to you.

To sign-up to speak during the public hearing or submit a written comment please send an e-mail to spfaltzgraff@ransonwv.us.

By Order of the Ranson City Council

Ordinance # ***

ORDINANCE # 2017- 302

AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: “JEFFERSON ORCHARDS” REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1).

AN ORDINANCE to amend certain portions of the official Zoning Map of the City of Ranson, West Virginia, for the purpose of reallocating transect districts within Smart Code New Community District (SC-NC) pursuant to Chapter 19-20 of the Ranson Municipal Code and Chapter 19A, Article 1 of the Ranson Municipal Code;

WHEREAS, West Virginia Code § 8A-7-8 and § 8A-7-9 permits the amendments to the zoning ordinance by either the governing body or petition by owners of fifty percent or more of the real property in the area in which the petition relates;

WHEREAS, Jefferson Orchards Inc. has submitted a rezoning petition and application;

WHEREAS, Jefferson Orchards, Inc., is the sole owner of the attached illustrated property, more commonly known as Jefferson Orchards, and being the same property, as described below, has petitioned the City of Ranson Planning Commission for a zoning map amendment to change the allocation of the transect districts within Smart Code New Community District (SC-NC);

WHEREAS, the Ranson Planning Commission adopted a Resolution dated August 7, 2017, recommending the Ranson City Council to amend the zoning map and change the subject property’s zoning from as specifically illustrated on the attached Zoning Application;

Ordinance # ***

WHEREAS, pursuant West Virginia Code § 8A-7-9, proper public notice and public hearings have been provided; and

WHEREAS, the rezoning petition is consistent with the 2012 Ranson Comprehensive Plan. The G3 Preferred Growth Sector of the application area is a priority expansion area of the 2012 City of Ranson Comprehensive Plan, and encourages the use of Chapter 19A Smart Code. As such, this rezoning petition conforms to the preferred vision of the Comprehensive Plan.

NOW, THEREFORE, be it enacted and ordained by the Council of the City of Ranson, West Virginia:

Section 1. The official City of Ranson Zoning Map be amended to reflect that Jefferson Orchards, located in District 8 of Ranson, Jefferson County, and identified on Map 12 as Parcel 1 consisting of approximately 389.7 acres is Smart Code-New Community (SC-NC) with new allocated transect districts.

Section 2. Consistent with Chapter 19A, Section 1.3.7, upon approval of the Land Development Plan and Plat by the Planning Commission pursuant to 3.1.4, specific transect districts shall replace the SC-NC designation on the official zoning map as part of the Planning Commission's approval of the land development plan and plat, so long as the allocation of the zoning districts within the land development plan and plat are consistent with Table 3 of Chapter 19A and the original rezoning to SC-NC. The replacement of specific transect zones on the official

Ordinance # ***

zoning map shall not be considered a zoning amendment pursuant to West Virginia § 8A-7-8 or West Virginia § 8A-7-9; thus, the placement of transect zones will not require further action of the Planning Commission or City Council. Transect zone placement shall be considered a continuation of the original SC-NC rezoning process pursuant to this Ordinance. So may be relocated within the parcel(s) administratively and on the official zoning map until final plat approval. Once the final plat is approved pursuant to Chapter 19A, 5.1.6.g transect districts may not be relocated or rearranged and may only be amended through the City's rezoning process.

Adopted by the City Council of the City of Ranson after a 1st reading on June 16, 2020 and second reading on June 23, 2020 by ____ in the affirmative, ____ in the negative with ____ abstentions.

Keith D. Pierson
Mayor

ATTEST:

Stacey A. Dodson Pfaltzgraff
City Clerk



J E F F E R S O N O R C H A R D S

City of Ranson
Jefferson County, West Virginia
District 8, Tax Map #12, Parcel 1

CHAPTER 19A REZONING REQUEST

JUNE 19, 2017

REVISED JULY 17, 2017

Owner / Applicant
Jefferson Orchards, Inc.
c/o Mark H. Ralston, President
P.O. Box 700
Kearneysville, WV 25430

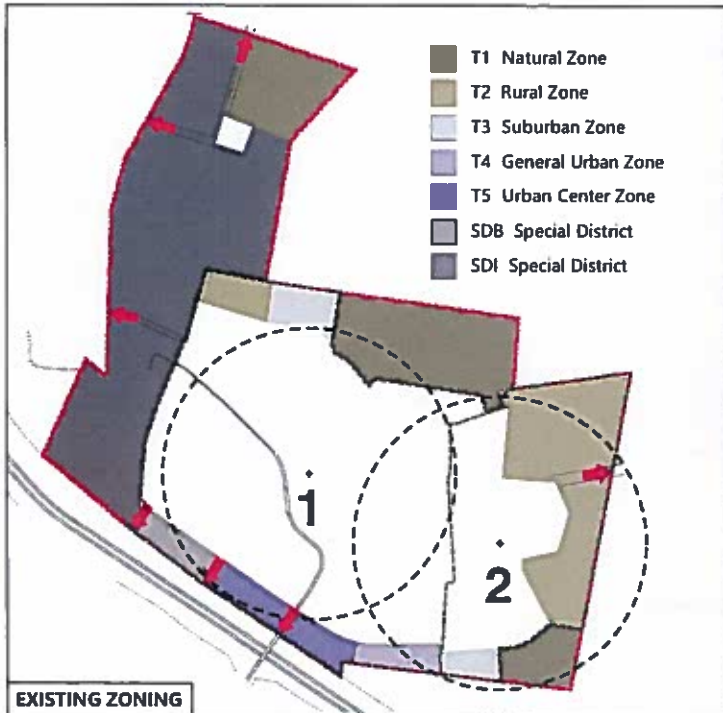


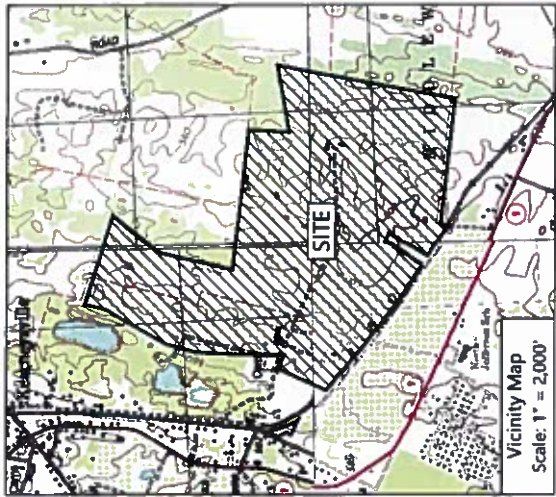
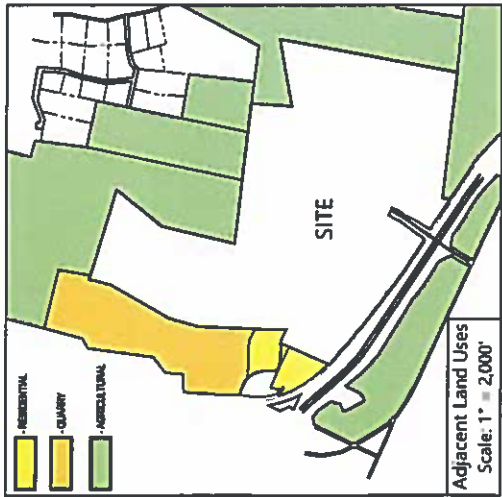
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Existing Conditions

The property is located in District 8 of Jefferson County, West Virginia and is identified on Map 12 as Parcel 1. The total area of the property is approximately 389.7 acres. The boundary information for the property is obtained from exhibit titled Plat of Resurvey prepared by Resource International Ltd. Adjacent parcel and right-of-way locations obtained from Jefferson County Tax Map information. The National Wetlands Inventory Map identifies a freshwater pond near the existing barn near Granny Smith Lane, no other wetlands are identified on the subject property. FEMA Map 54037C0020E, 54037C0040E, 54037C0110E, and 54037C0130E does not identify a 100-year floodplain on the property. No known right-of-ways or easements exist on the property other than easements associated with individual service utilities such as overhead electric.





SLOPE ANALYSIS LEGEND				
SLOPE RANGES	SLOPE RANGE (APPROXIMATE)	AREA (AC)	PERCENT OF SITE	
0	15	278.9	87.2	[White]
15	25	7.9	2.4	[Light Green]
25	35	2.3	0.8	[Yellow]
35+		1.5	0.4	[Red]

JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
 CHAPTER 19A REZONING REQUEST - REVISED JULY 17, 2017
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EXISTING CONDITIONS
 Topography and Adjacent Land Use

Sector Plan

The G3 Preferred Growth Sector of the application area is a priority expansion area of the 2012 City of Ranson Comprehensive Plan, and encourages the use of Chapter 19A SmartCode. As such this request conforms with the preferred vision of the Comprehensive Plan.

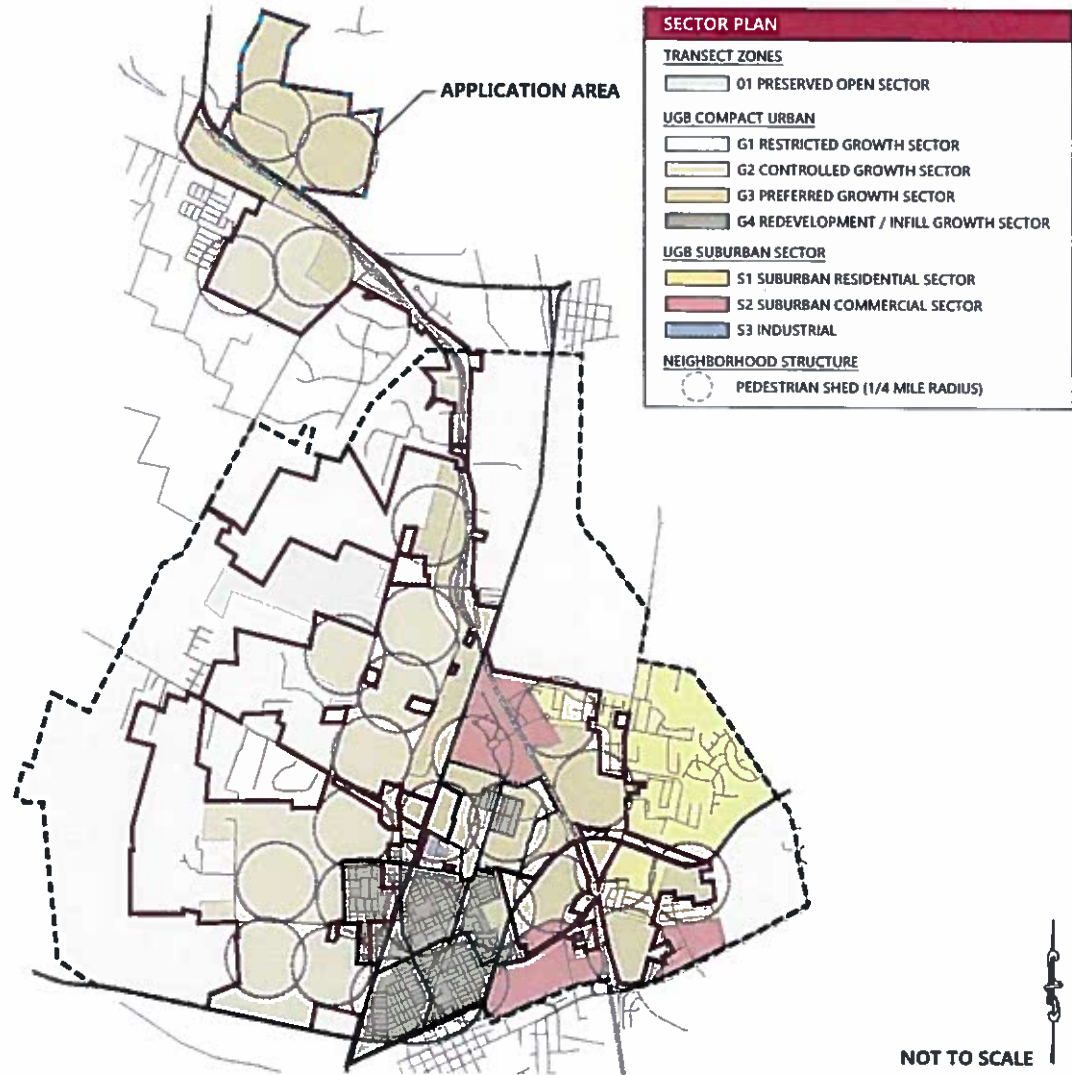
Within the G3 Sector, the following acreage requirements are necessary for rezoning:

- a. Hamlet (HAM): 10-50 acres per HAM
- b. Village (VIL): No fewer than 40 acres and no more than 200 acres per VIL
- c. Town Center (TCT): No fewer than 40 acres and no more than 200 acres per TCT. Multiple Community Units may be included in one rezoning request, provided each Community Unit meets its acreage requirements.
- d. The Comprehensive Plan has five sector designations. Distinct from land use or intensity, these sectors express whether or not a particular area is intended for growth or not and then, what type of growth is expected: restricted, controlled, intended, and infill.

This site is currently assigned G-3, which is the most aggressive greenfield development allocation in the City. The City has allocated this sector on both sides of the Route 9 interchange to support private investment in mixed-use and residential development.

The G-3 Preferred Growth Sector fulfills the City's Comprehensive Plan Policies for responsible growth, and are the areas in the Urban Growth Boundary where the City intends for the most intense development. These are the areas that the City have also invested resources to expand and improve infrastructure to support this growth.

Information / image obtained from the City of Ranson 2012 Comprehensive Plan.



Proposed Community Type

One Medium Intensity Village and Special District Industrial.

Acreeage Requirements

1.3.5.b Village (Vil): No fewer than 40 acres and no more than 200 acres per village.

Proposed Medium Intensity Village: 152.4 acres

3.9.6.b. Industrial Special District (SDI): Limited to a maximum size of 200 acres.

Proposed SDI Area: 198.7 acres

Special Districts

3.9.1. Special district designations shall be assigned to areas that, by their intrinsic size, use, or configuration, cannot conform to the requirements of any Transect District or combination of districts

3.9.3. Special districts may be mapped within or outside of community units. If mapped within a community unit, a special district shall not exceed 20% of the net site area.

Edge Transect Districts

The proposed T-Zones to the north include T1, T2, and SDI. SDI is proposed along the western border with access to the rail line. T1 and T2 are along the eastern edge. SDI, T5 and T4 are along Route 9 to the south. If the Duffields station is relocated, the station would be in the T5 area north of the rail and Route 9. Connections are proposed to the north, south and east, as well as maintaining or improving the connection to Charles Town Road.

Maximum Density:

Village (Medium Intensity) - 2,517 DU

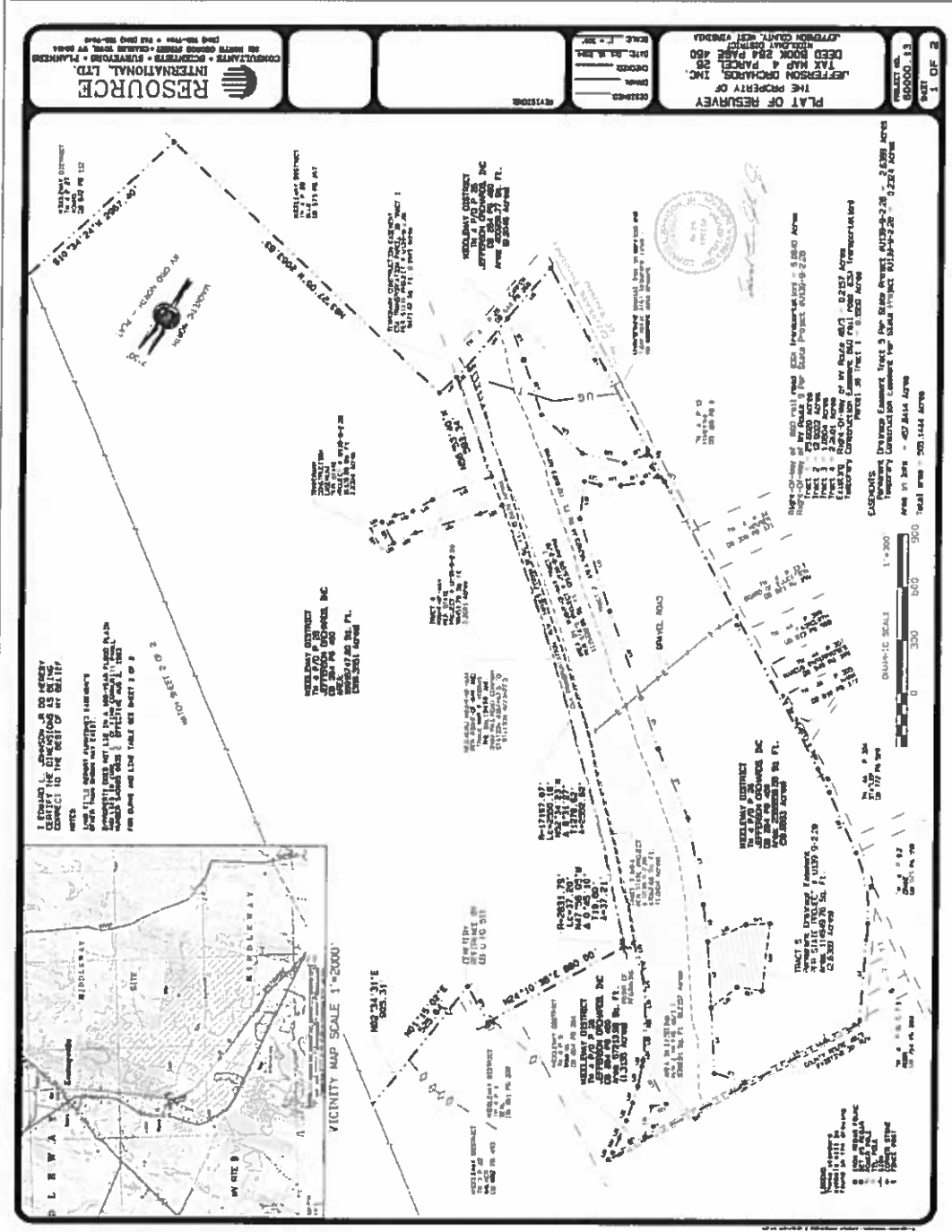
Perimeter Connectivity:

Additional connections will be made to Co. Route 48/3, to the north, and to the east as adjacent properties permit.



JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
CHAPTER 19A REZONING REQUEST - REVISED JULY 17, 2017
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EDGE CONDITIONS
Transect Zones



PLAT OF RESURVEY

THE PROPERTY OF
JEFFERSON ORCHARDS, INC.
TAX MAP #4 PARCEL 28
DEED BOOK 284 PAGE 480
JEFFERSON COUNTY, WEST VIRGINIA

RESURVEYED BY
DATE: OCT 18, 2017
DRAWN BY
CHECKED BY

SCALE: 1" = 200'

RESURVEYED BY
DATE: OCT 18, 2017
DRAWN BY
CHECKED BY

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JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
CHAPTER 19A REZONING REQUEST - REVISED JULY 17, 2017
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Stacey Pfaltzgraff

From: Mike Aaron <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:25 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents. You also have a responsibility to be a good neighbor. Many people living outside of your jurisdiction are downwind of this proposed site. Emissions will not observe state borders.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality. Property values will also likely suffer. If you approve this ordinance, your legacy as a board will be infamous.

Reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your time and consideration.

Mike Aaron
mikeaaron1@aol.com
12484 Harpers Ferry Road
Purcellville, Virginia 20132

Stacey Pfaltzgraff

From: Joy Ackert <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 7:57 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Joy Ackert
joy0626@gmail.com
29 OLD HICKORY PL
HARPERS FERRY, West Virginia 254256133

Stacey Pfaltzgraff

From: Laurie Allen <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:26 PM
To: Stacey Pfaltzgraff
Subject: NO Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand AGAINST heavy industry rezoning at the Jefferson Orchards site. Heavy industrialization is not why I've lived in Jefferson County for the last twenty years, and the eastern panhandle for the last thirty. We need to invite clean employers to our area, and preserve our little piece of almost heaven, West Virginia.

Please REJECT Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

The allocation of an industrial zone can negatively affect local agriculture, equine community, and tourism industry; can impact the health of nearby schoolchildren; and can deteriorate air, land, and water quality.

Thank you for your consideration.

Laurie Allen
lovejoy444@aol.com
702 S Beckwith St
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Robert Allen <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:26 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Robert Allen
rsallenjr@aol.com
143 Garland Dr
Summit Point, West Virginia 25446

Stacey Pfaltzgraff

From: Julia Andrews <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 3:44 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwood over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Julia Andrews
Juliaandrews14@gmail.com
383 Lookout Mountain Ct
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Julia Anthony <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 12:49 PM
To: Stacey Pfaltzgraff
Subject: No input- No rezoning

CAUTION: External Email

Stacey Pfaltzgraff,

Heavy industry has no place in today's modern life, especially anything that is fossil fueled. We should be shutting down areas like this not expanding them.

Our county stands on the cusp of a reinvented West Virginia. We should be striving towards change and not slipping back into morass of use and waste.

Morally how this rezoning was done was wrong! You know it and I know it. Instead of having an open discussion with the citizens of Jefferson county they resorted to skirting the law and working loopholes. Doing the minimum to include the people who live here in a decision which will change forever the fabric of our community.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Julia Anthony
jta369@yahoo.com
275 Bell Rd.
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Bruce Appelgren <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 3:57 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Bruce Appelgren
baappelgren@comcast.net
415 E Academy St
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Benjamin Arthur <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:38 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Benjamin Arthur
sethandbethanne@gmail.com
19 Wilderness Court
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Bethanne Arthur <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:37 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Bethanne Arthur
arthurbethanne@gmail.com
19 Wilderness Court
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Elaine Ashbaugh <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 1:56 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Elaine Ashbaugh
beegirlwv@yahoo.com
119 Orchard Drive
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Gonzalo Baeza <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 9:26 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Gonzalo Baeza
gbaeza@gmail.com
31 McDonald Dr.
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Lisa Bagnall <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 1:45 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

PLEASE, please, do NOT continue on the path of heavy industry. We want our tourism, equine and agricultural sectors to flourish. We want CLEAN air and water.

Please for the comfort and safety of OUR CITIZENS - and the future of our planet, perform a course correction- away from heavy industry.

The transportation, housing and retail that was planned is much better use of that land and will benefit our county.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Lisa Bagnall
lisabagnall@live.com

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

160 Campbell Dr
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Hillary Banachowski <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 12:17 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Hillary Banachowski
hillarybanachowski@gmail.com
1799 Persimmon Lane
Shepherdstown , WV 25443

Stacey Pfaltzgraff

From: Danielle BARGET CLAGG <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 3:37 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Danielle BARGET CLAGG
dj2296@comcast.net
41 Stone River Court
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: John Barrat <info@sg.actionnetwork.org>
Sent: Friday, June 12, 2020 6:32 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

John Barrat
barratj522@gmail.com
260 Falling Springs Road/P.O. Box 1622
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Martin Bauer <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:34 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Martin Bauer
jmartinbauer@gmail.com
421 S George Street
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Matthew Bellacosa <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 10:57 AM
To: Stacey Pfaltzgraff
Subject: Vote No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Mayor Pierson, Ranson City Council Members, and to all who will read this,

I speak for many. I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

Did you swear an oath as you took office? Foreign and multi-national corporations do not swear or affirm any oath or creed. If you value the difference, you will not allow some entity to poison and pollute your charge.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Sincerely,
Matthew Bellacosa

Matthew Bellacosa
bellacosa42@icloud.com
321 Calmes St
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Kraig Benson <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 4:57 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kraig Benson
warp2speed@aol.com
269 Oakmont Dr
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Anita Bernhardt <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 7:32 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Anita Bernhardt
qt100@frontier.com
200 CLEARVIEW RD
HEDGESVILLE, WV, West Virginia 25427

Stacey Pfaltzgraff

From: Susan Biggs <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 10:18 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Susan Biggs
susanbiggs@aol.com
145 Shamrock Ln
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Brian Biller <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 8:18 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Brian Biller
biller1982@yahoo.com
4922 Charles Town Rd
Kearneysville, West Virginia 25430

Stacey Pfaltzgraff

From: Linda Bishop <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 6:52 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Linda Bishop
cloudandfire@comcast.net
188Lookout Mountain Court
Harpers Ferry , West Virginia 25425

Stacey Pfaltzgraff

From: Michele Bloom <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 2:48 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to please stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents. All the residents of Jefferson county and surrounding areas and states will be affected by this decision. Present and future generations will be harmed if this ordinance passes.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Michele Bloom
mbloom1114@gmail.com
527 Maddex Farm Dr
Shepherdstown, West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Joette Borzik <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 5:39 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Joette Borzik
pep4223@comcast.net
619 Breckenridge Way
Shenandoah Junction , West Virginia 25442

Stacey Pfaltzgraff

From: Joette Borzik <info@sg.actionnetwork.org>
Sent: Friday, June 12, 2020 12:03 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Joette Borzik
pep4223@comcast.net
619 Breckenridge Way
Shenandoah Junction , West Virginia 25442

Stacey Pfaltzgraff

From: Lisa Botluk <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 6:27 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

I urge you to protect and respect the wishes of the citizens and to protect the environment. Do not sell out.

Thank you for your consideration.

Lisa Botluk
lisab801@msn.com
416 Mulberry St
Lewes, Delaware 19958

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Rebecca Bradford <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:54 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Rebecca Bradford
rebeccabradford@rocketmail.com
52 Dunlap Drive
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Aaron Brammeier <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 2:12 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for doing your job to protect the citizens of Ranson from pollution by VOTING NO!

AB
 NTTWO

Aaron Brammeier
 nevertamethewildones@gmail.com
 204 Racetrack St. Apt 1
 Ranson, West Virginia 25438

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: MARTIN BURKE <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 1:01 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

MARTIN BURKE
martinburke@frontiernet.net
1328 Terrapin Neck Rd.
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Ruth Burns <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 9:37 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.
Sincerely your constituent,
Dr. Ruth Burns

Ruth Burns
roofedor@hotmail.com
83 Veronica Lane
Charles Town, Texas 25415

Stacey Pfaltzgraff

From: Megan Burriss <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:51 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Megan Burriss
Gloryroad13@gmail.com
55 Mopsy Ct
Ranson, West Virginia 25438-4820

Stacey Pfaltzgraff

From: Kelly Campbell <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 8:05 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kelly Campbell
kelly1.campbell329@frontier.com
525 East Washington Street
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Sara Carley-Peña <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 8:58 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Sara Carley-Peña
carleypena@yahoo.com
47 Fairmont Ave
Shepherdstown , West Virginia WV

Stacey Pfaltzgraff

From: Sara Carpey-Peña <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 11:28 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sara Carpey-Peña
carletpena@yahoo.com
47 Fairmont Ave
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Laura Carter <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:27 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Laura Carter
missmossma@gmail.com
15 Big Bear Ln
HF, West Virginia 25425

Stacey Pfaltzgraff

From: Peri Celik <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 3:17 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Peri Celik
pericelik@yahoo.com
571, Edwin Blvd
Shenandoah Junction, West Virginia 25442

Stacey Pfaltzgraff

From: Robert Chan <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 1:46 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

I have been looking for purchase vacation property within Jefferson County but should Rockwool continue with construction I'll look in neighboring Loudoun, Clarke, or Washington County as smoke stacks and industrial scenery is not what we have in mind when purchase a vacation spot.

Thank you for your consideration.

Robert Chan
chan.robertk@me.com
229 Lariat Drive
Kearneysville, West Virginia 25430

Stacey Pfaltzgraff

From: Emily Chiappinelli <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 8:02 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Emily Chiappinelli
emilychiapp@gmail.com
667 Huyett Road
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Antonio Chicchirichi <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:16 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Antonio Chicchirichi
tonyc25414@gmail.com
400 Lone Oak Road
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Martha Christian <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 12:39 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Martha Christian
marthacrawfordchristian@gmail.com
755 Otter Creek
Gerrardstown, West Virginia 25420

Stacey Pfaltzgraff

From: Jack Chromey <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 10:13 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

As a citizen of Jefferson County in nearby Charles Town I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jack Chromey
jackchro@aol.com
101 w. Washington St., unit 517
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Debbie Clise <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:27 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Debbie Clise
 dlclise@yahoo.com
 14806 Leetown rd
 Kearneysville , West Virginia 26430

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jason Connell <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:06 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jason Connell
chefconnell@gmail.com
673 Oak Hill Ave, Apt 3A
Hagerstown, Maryland 21740

Stacey Pfaltzgraff

From: Anna Cook <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 12:34 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Anna Cook
tigger7713@yahoo.com
659 Cherry Run Rd
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Colin Cook <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 8:41 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site. Jefferson County does not need heavy industry in the area. The area would better serve as a Costco or other large retailer bringing jobs and an actual service to the community. The county is growing towards a nice mix of agriculture and strong middle class, good schools and services should be priority development not heavy industry.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County. There is a reason why the area is not zoned for heavy industry and there is no reason to rezone. There are too many schools and communities that will be negatively affected by heavy industry in the area. This type of industry should be in an area with less people.

Thank you for your consideration.

Colin Cook
cookcolin@gmail.com
659 Cherry Run Rd
Harper's Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Sue Covello <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 12:19 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sue Covello
covellosl@citlink.net
7124 Queen Street
Middleway, West Virginia 25430

Stacey Pfaltzgraff

From: Marcia Croghan <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:04 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Marcia Croghan
Mcroghan123@gmail.com
207 S Tamarac Drive
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Chris Dardick <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:03 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

In July, 2019 I sold my house in Shenandoah Junction to downsize. We had an extremely difficult time selling, in part, due to the concerns about construction of the Rockwool plant so close to our neighborhood. We had at least 3 potential buyers state this as the reason to not submit an offer. There were likely many more who simply refused to look at homes so close to the future factory. We were fortunate to find a buyer after 1 year on the market but at a much reduced price.

By approving this zoning change, Ranson will cause tens of millions of dollars in lost residential property values and forever change the character of Jefferson County. Whatever cost you believe may be exacted by Rockwool if you don't approve will be dwarfed by the impact on property values and lost opportunity costs for residential construction and service industry businesses. Collectively this could amount to over \$100 million. As a public servant you have the responsibility to carefully weigh these issues in making a decision. I plead with you to please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Chris Dardick
cdardick@comcast.net
32 King Lear Drice
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Sonya Deiches <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 10:00 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Hello-

My husband and I are new resident of Shepherdstown (just bought a house here a year ago) and have a young infant. I love our little town here in Jefferson county, but am very concerned about the potential Rockwool plant affecting the health of our family, friends, and neighbors. We do not feel heavy industry is the right fit for Jefferson County.

Please stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sonya Deiches
sonyarowe@uwalumni.com
435 Sandpiper Ln
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Michael Dion <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 8:08 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Michael Dion
mrd71@yahoo.com
107 Briar Run Dr
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Emily Dragon <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 12:47 PM
To: Stacey Pfaltzgraff
Subject: Please Vote No to Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

I live closer to the site than the vast majority of the city of Ranson and I am incredibly concerned about the welfare of my family and the families that live around me if Jefferson Orchards is allowed to be rezoned to allow heavy industry. When we moved to our home we specifically looked at the land uses and zoning around the areas we were considering and were completely shocked when we heard years later that Ranson was considering allowing a major polluter where we thought they would never be permitted. Especially concerning is the area's proximity to several schools and daycare facilities.

There are -so- many reasons that a facility like Rockwool, or ANY major polluter, would be a terrible fit for our county and that space in particular, but my primary concerns are the additional pollution that would be present at the nearby schools and in the county as a whole during our valley's weather inversions as well as the potential for toxic materials to end up in our water if a spill should occur. Karst topography is known to be easily contaminated and almost impossible to clean up and a large part of our county relies on well water.

I understand that when the council initially approved of allowing heavy industry at Jefferson Orchards a lot of the current research into the consequences of rezoning that space was unknown. Now, several years later, enough data has been discovered and presented in public meetings that ignorance is no longer a valid excuse.

Rezoning that space is an incredibly and unprecedentedly unpopular move that is clearly against the will of the majority of the citizens of our county.

Stacey Pfaltzgraff

From: Diane Drake <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 8:57 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Diane Drake
 DianeMDrake@yahoo.com
 310 E Washington St
 Charles Town, West Virginia 25414

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Emily Dragon
emmilely@gmail.com
187 Steeple Chase Dr.
Shenandoah Junction, West Virginia 25442

Stacey Pfaltzgraff

From: Stuart Ehrenberg <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 9:08 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to vote against Ordinance #2017-302.

I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of our community.

It is shocking that a foreign company that provides a small handful of low paying jobs can be given such consideration given the damage they will do to our community. EVERYONE sees it.

No one who has looked at this issue doesn't believe that there isn't corruption behind the way this whole thing has moved into our community. It is blatantly obvious that if this is passed that pockets are being lined. By voting in positive way you will be seen as part of that corruption by your community.

I urge you to stand with your community show that you are not part of the corruption by rejecting Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Stuart Ehrenberg
sehrenberg@c-wall.net
127 Equestrian Circle
Shenandoah Junction, West Virginia 25442

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Hilda EiberMcCabe <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:26 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Hilda EiberMcCabe
uberoma@gmail.com
82 Manassas Drive
Falling Waters, West Virginia 25419

Stacey Pfaltzgraff

From: Paul Errett <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 1:21 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Paul Errett
pistonman622000@yahoo.com
22 Pine Tree Lane
HARPERS FERRY, WV, West Virginia 25425

Stacey Pfaltzgraff

From: Sonya Evanisko <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 1:12 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Please listen to your citizens and Jefferson County residents. This is our home- we never asked for or desire heavy polluting industry in our County.

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sonya Evanisko

Sonya Evanisko
sevanisk@shepherd.edu
105 w high street
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Jeffrey Feaga <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 1:41 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

Further, as a valued community within the county of Jefferson, WV, it is important to consider the vision of residents throughout the county. Heavy industry was not a land use that was desired in the last comprehensive plan completed by the county. Please honor the will of the people.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Particulate matter of 2.5 microns is known to cause many negative health effects. Thus, the short term monetary benefit to Ranson does not outweigh the future costs to the health of our young and vulnerable residents.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jeffrey Feaga
 feagaj@gmail.com

643 South Church Street
Shepherdstown, West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Colleen Fechner <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:34 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Colleen Fechner
gregandcolleen@ymail.com
14 Crows Nest Lane
Kearneysville , West Virginia 25430

Stacey Pfaltzgraff

From: Logan Feeney <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 6:14 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

Do not make this area of the country a third world cesspit for a European based company that seeks to offshore its pollution.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Logan Feeney
loganjfeeney@gmail.com
591 chukkar ct
Frederick , Maryland 21703

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Cynthia Feeser <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 10:03 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

How did a federally funded plan to build a sustainable community devolve so quickly into a heavy industrial facility permitted to be the second-largest emitter of VOCs in the state of WV?

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

I'm concerned about our air and water. Why aren't you?

Thank you for your consideration.

Cynthia Feeser
cjfeeser@gmail.com
5567 Engle Molars rd
Shepherdstown, West Virginia 25443

Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Marie E. Uehling

Marie Uehling
meuehling@gmail.com
630 Fillmore Street
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: sheldon fischman <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 5:02 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Besides the pre-printed message below I would like to add that this whole venture is wrong headed and underhanded. Public comment - if it has been allowed - would have squelched the initiative. There are other types of industry that could have been brought in. The site is geologically unstable. The original discharge from the smoke stacks was said to be water vapor. One of so many lies. You are lucky this isn't France. Rockwool would have been burned to the ground. If you were capable of shame you would have withered.

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

sheldon fischman
shelhfisch@aol.com
103 Deer Ridge Drive
harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Reed Flinn <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 7:19 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community. does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Reed Flinn
reedflinn@gmail.com
23 Windsong Road
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Juliane Ford <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 3:43 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Heavy Industry was NEVER meant to be built at Jefferson Orchards. That is something we ALL know. The people who romanced Rockwool and sealed the deal knew that too. That is why they did it urgently and quietly.

Do the right thing and vote no. Yes the consequences may be great, but these consequences are the responsibilities of the people who got us into this mess. Not the people of Jefferson County, not the children, not our neighbors not the the air or the land.

I have not been an activist, but I thank those who have been fighting for the people and sadly it has not been our politicians. Grow a set and do the right thing. REJECT THE ORDINANCE or forever be on the wrong side of history.

Juliane Ford
ford-clan@comcast.net
293 Westwoods Lane
Charles Town, WV, West Virginia 25414

Stacey Pfaltzgraff

From: Keri Fornino <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:43 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Keri Fornino
kerienca@aol.com
35467 Sunny Ridge Rd
Round Hill , Virginia 20141

Stacey Pfaltzgraff

From: Cynthia Fraula-Hahn <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:45 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Cynthia Fraula-Hahn
cfraula@me.com
Po Box 594, 7 Old Prospect Ave
SHEPHERDSTOWN, West Virginia 25443

Stacey Pfaltzgraff

From: Emmett Fremaux <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 12:34 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Emmett Fremaux
emmett.fremaux@gmail.com
594 Shannondale Rd
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jusuf Fuduli <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 6:02 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jusuf Fuduli
fuduli@hotmail.com
1179 W. Washington Street
Bolivar, West Virginia 25425

Stacey Pfaltzgraff

From: William Gaestel <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 5:48 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

William Gaestel
bgaestel@live.com
1602 Kearneysville Pike
Shepherdstown, West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #1 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Tara Garrison <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:43 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Also, as a health professional the health concerns of this facility are real, well documented in the scientific literature, and not a fabrication or exaggeration. Please take the time to research

the well known detrimental effects of PM 2.5 and consider if that is something you want your family and your community exposed to in increased levels. Having the knowledge of the known issues associated with the emissions of facilities such as Rockwool and continuing to push them forward makes you complicit in the future health issues of our community.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Tara Garrison
t1p723@hotmail.com

Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: agodlove@luxphotoservices.com <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 8:58 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson and it's surrounding cities/ counties, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare residents.

General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31).

Under the comprehensive plan the proposed zoning does not line up with overall the comprehensive plan. The changes will impact the quality of citizens lives. accessibility to public green spaces, and will negatively impact property values. With Jefferson County having the highest property value average in the state this could significantly impact revenue to the county and state.

The specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5). This was commitment you made to the citizen of Ranson and surrounding areas.

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents. Again these factors will impact the desirability of Ranson and Jefferson County.

Singling out the Jefferson Orchards parcel for an Industrial District use classification is different and inconsistent with the surrounding areas classification. To benefit one particular owner to the detriment of neighbors and the surrounding community is wrong. This change does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development as outlined in the comprehensive plan.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your time and consideration.

Sincerely,
Amanda Godlove

agodlove@luxphotoservices.com
190 Goode lane
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Peggy Gordon <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 12:17 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

This company will come in, wreck our environment for a few jobs, then pull out and leave us with the mess. This company is NOT a good fit our agriculture and tourism! It's not a good fit for West Virginia. We've had enough of corporations wreaking havoc on our beautiful state - haven't you?

Thank you for your consideration.

Peggy Gordon
 peggyagordon@gmail.com
 184 Amnesty Way
 Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Mark Gorgas <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 6:42 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Mark Gorgas
vthokiebc@yahoo.com
52 Velveteen Court
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Amanda Goss <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:45 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Amanda Goss
2amandagoss@gmail.com
70 Thomas Jefferson Circle
Ranson, West Virginia 25438

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Henry Goss <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 2:08 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Henry Goss
hgoss050681@gmail.com
70 Thomas Jefferson Circle
Ranson, West Virginia 25438

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Christina Greenberg <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 2:39 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Christina Greenberg
cgreenberg142@hotmail.com
142 Posting Way
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Tawny Greene <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:24 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Tawny Greene
tawnygreene@yahoo.com
96 Lookout Mountain Ct
Harpers Ferry, West Virginia 25425-2202

Stacey Pfaltzgraff

From: Rebecca Hamilton <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 7:18 AM
To: Stacey Pfaltzgraff
Subject: Do NOT rezone Jefferson Orchards!

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

It has already been shown that the land itself cannot sustain heavy industry, with the numerous sinkholes already at play. Rockwool (Rosul) came here with the express purpose of not following their own homeland's environmental rules for industry, which puts several schools, numerous local businesses, multiple counties, and countless citizens at risk from the water runoff and particulate that will be expelled by this factory. Jefferson County has put great effort into building up the ecotourism, college, and small town draw of this area; Rockwool and further heavy industry would destroy it.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you.

Rebecca Hamilton
rhoubouzar@gmail.com

5558 Charles Town Road
Kearneysville, West Virginia 25430

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jennifer Hanes <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 4:47 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Please, please, please, for the future of our community, you must stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jennifer Hanes
jen_hanes@yahoo.com
201 S. King Street
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Daniel Hatcher <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 9:39 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

As our Country is in turmoil for social justice we should take every opportunity to ensure that our government representatives are respecting our wishes as is their duty.

Thank you for your consideration.

Daniel Hatcher
jackhatcher123@yahoo.com
103 Marl Dr.
Ranson, West Virginia 25438

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Beth Healey <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 5:51 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

I have three school age children who live Jefferson county for it's beauty, small town atmosphere, and outdoor activities, but I have to protect them. We don't want to live in or near an irresponsible industrialized area. Many of our friends have moved because of Rickwool, and we don't want to. Please protect my family and families like mine! Please protect the citizens of Jefferson county and nearby areas. Please be decent people!

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Beth Healey

Beth Healey
 healey07@yahoo.com

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

363 Nansfield Drive
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Bruce Heller <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 10:11 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Bruce Heller
bruceheller69@yahoo.com
400 Deer Ridge Dr.
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Sharon and Michael Helman-Harman <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 12:02 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

This community will suffer loss of environmental quality that is crucial to 3 of its main industries and sources of income, income that provides a greater tax base to the state of WV than any other county. To say nothing of the health and quality of life of its residents and their families and their futures. Again, to say nothing of the expansive and sustainable job opportunities of these industries and the many that the revised plan robs from the well thought out original Comprehensive Plan that would benefit the community, not a foreign multinational corporation. You callously and dismissively ignored the hard work of your fellow citizens that worked so diligently to provide a Comprehensive Plan with the health and welfare of their neighbors in mind. What we will be left with is that due to a handful of low-level politicians who apparently have ulterior motives because nothing can explain the low-level rationale of the decisions you have made in spite of in excess of 10,000 of your neighbors who expressed their vehement opposition once they were allowed to learn about what you had done behind closed doors a year earlier. Naming this debacle "Project Shuttle" was a clear indication of the intentional deception and fraud and corruption of your actions. This is behavior that you can't feel good about in church. And frankly, your lawyer's claims at the June 16, 2020 meeting that the health and welfare of the community is beyond the law, is laughable. Is this the legacy that you want to leave for yourselves and your families?

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Sharon and Michael Helman-Harman
nharmanshelman@gmail.com

394 Dey Dr
Harpers Ferry, West Virginia 25425-5935

Stacey Pfaltzgraff

From: Rita Hennessy <rhennesy25443@gmail.com>
Sent: Thursday, June 18, 2020 6:42 AM
To: Stacey Pfaltzgraff
Subject: Public Comment - Proposed Rezoning

CAUTION: External Email

Ms. Faltzgraff,

Please accept this email as part of the public comments concerning the The City of Ranson proposal to rezone the Jefferson Orchards property from "New Community District" to "Special District Industrial." I expressly oppose this proposal.

I have been a property owning, tax paying resident of Jefferson County since 1993. I retired last December, and am looking forward to enjoying my property and surround resources, as currently zoned. I purposely chose to stay in Jefferson County because of its unique qualities as a gateway to Wild and Wonderful West Virginia. Never did I believe our county and city leaders would go behind the backs of it residents to allow major industry to take place, and then retroactively try to change the zoning. This is unacceptable. For the record, I am not in favor of this proposal. Jefferson Orchards should remain zoned as a new community district.

Rita Hennessy
 2043 Terrapin Neck Road
 Shepherdstown, WV 25443

--

Rita Hennessy
 Board Member of both -
 Jefferson Growers, Artisans, Producers Coalition
 Potomac Valley Audubon Society

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Gary Hoffman <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:17 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Rockwool will never be a good neighbor! Sinkholes have happened multiple times, this threatens my family's drinking water. Rockwool could install technology that would somewhat help alleviate air or water pollution but refuses to do so. The amount of water or coal that will be used is mind boggling. Definitely not a good neighbor!!

Thank you for your consideration.

Gary Hoffman
Hbamusicnet@gmail.com
628 Ann Lewis Rd.
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Libby Hoffmann <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:16 PM
To: Stacey Pfaltzgraff
Subject: Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your commitment to the health and safety of the people in our WV community.

Libby Hoffmann
libbyhoffmann@yahoo.com
132 Darden Ct E
Martinsburg, West Virginia 25403

Stacey Pfaltzgraff

From: Paul Holzberger <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 2:08 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Speaking of nearby schools, I have four children, three of whom are in schools directly down wind from this factory. You could not have hand-picked a worse location to locate this if you were trying. Their future health is literally in your hands.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Paul Holzberger
paul@holzberger.com
25414
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: William Howard <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 4:54 PM
To: Stacey Pfaltzgraff
Subject: Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

It is not often that you get a second chance. I urge the Council to vote "no" on the amendment and get on the right side of history. Please do this for the citizens of Ranson and Jefferson County. The evidence and the mandate is clear—heavy industry has no place in Jefferson County. Do this for the health and future of children, our air, our land, and our water, our very way of life. I can promise you that acknowledging these truths and doing the right thing will set you free. Please help bring about the change that we so desperately need in our world.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Sincerely,

William Howard
Shepherdstown

William Howard
wrhoward@me.com
183 Howard Farm Road
Shepherdstown, West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Sara Howle <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:49 PM
To: Stacey Pfaltzgraff
Subject: Vote No to Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Please vote against heavy industry rezoning at the Jefferson Orchards site.

As you are aware this is a decision that has many direct consequences, not only for us now, but for the future generations of our area.

You have the power in your hands to gift them a future of a wonderful blessing or if heartache and misfortune. Please choose to pass on this beautiful place as one that will continue to provide good natural food and habitats for wildlife. Do not choose instead to give them a place where they will have to continue to fight problems caused by years of heavy industry. Now is the moment in history when you have this choice. Please make the right one for our future.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sara Howle
sara.howle.8@gmail.com
450 Deer Mountain Drive
Harpers Ferry , West Virginia 25425

Stacey Pfaltzgraff

From: LaTasha Hughes <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 3:20 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

LaTasha Hughes
nzurihughes@me.com
22 Riparian Lane
Ranson, West Virginia 25438

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Rebecca Hutchinson <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:13 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Rebecca Hutchinson
rjhutch58@aol.com
326 steamboat run road
Shepherdstown , West Virginia 25444

Stacey Pfaltzgraff

From: Katelyn Jenkins <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 6:50 PM
To: Stacey Pfaltzgraff
Subject: From a mother of 3 - No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

I am a mother of 3 that has lived in Jefferson County for a little over 2 years. My family moved here because of the beauty of the area, the small town feel, and the hopes of raising our family here. We were distraught to hear of Rockwool after buying our house and after all is said and done, if Rockwool opens its factory doors, we will be selling and moving, even if we sell at a loss. My families health is more important.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Katelyn Jenkins
katelyn.d.jenkins@gmail.com
157 Colonial drive
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Alice Johns <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:30 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Alice Johns
johnsalice16@gmail.com
187 mordington ave
Charlestown , West Virginia 25414

Stacey Pfaltzgraff

From: Christine Johnson <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 7:05 AM
To: Stacey Pfaltzgraff
Subject: NO HEAVY INDUSTRY FOR MY CHILD

CAUTION: External Email

Stacey Pfaltzgraff,

TAKE A MOMENT TO THINK OF ALL THE CHILDREN YOU WILL BE POISONING FOR GENERATIONS TO COME.

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Christine Johnson
ariversmum@gmail.com
157 Aerie Lane
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Daniel Johnson <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 3:13 PM
To: Stacey Pfaltzgraff
Subject: Local Small Businesses Against Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

We own a small business in Harpers Ferry that relies on tourism in our area. By rezoning part of our beautiful county to heavy industry you will kill my business. We will have to relocate our business and family. Our business will at least pay taxes here. Put our local businesses first!

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Daniel Johnson
danny_flips23@yahoo.com
157 Aerie Lane
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Jennifer Jones <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:12 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

An industrial zone will cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and will deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jennifer Jones
jenajones44@gmail.com
83 Shepherd Ln
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Jodi Jones <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 12:20 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Jodi Jones
jodijones0@gmail.com
205 Princess Street
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Amee Kearns <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:28 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Amee Kearns
ameekearns@msn.com
14806 Leetown rd
Kearneysvill , West Virginia 26430

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Sue Kennedy <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 7:34 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Sue Kennedy
kennedysue2010@comcast.net
102 old queen alley
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Tammy Kershner <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 12:58 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Tammy Kershner
stkershner@frontier.com
219 West German Street
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Jane King <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 5:39 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jane King

Jane King

birdiethecat@hotmail.com

515 lord Fairfax st

Charles town , West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jennifer King <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 1:47 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jennifer King
 info@eversweetapiaries.com
 85 Everhart Drive
 Kearneysville, West Virginia 25430

Stacey Pfaltzgraff

From: Marge Kingdon <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 8:39 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Marge Kingdon
margekingdon@aol.com
755 Otter Creek Drive
Gerrardstown , West Virginia 25420

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jean Klemm <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 6:51 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jean Klemm
jklklemm@citlink.net
261 Westwoods Lane
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Cynthia Krasner <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 8:25 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Cynthia Krasner
cynthiakrasner@yahoo.com
288 Cirrus Way
Kearneysville, West Virginia 25430

Stacey Pfaltzgraff

From: Richard Krasner <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 5:01 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Richard Krasner
Richard.Krasner@yahoo.com
288 Cirrus Way
Kearneysville, West Virginia 25430

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kelly Ku <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 6:47 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kelly Ku
kellyku0618@yahoo.com
271 chickamauga drive
Harpers ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Aleksander Kupiszewski <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:25 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Aleksander Kupiszewski
aleksander.kupiszewski@gmail.com
146 Shepherd Lane
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Denise Kupiszewski <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:38 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site. PLEASE!

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality. Property values will also plummet and stall for years to come in the county. No one wants to live near a heavy metals industrial zone!

Think of the alternative of putting in a world class self supporting residential community and the money the town and county can generate from something like that in years to come. Please consider moving our county and our state FORWARD in a positive light!

Please REJECT Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Denise Kupiszewski
 muddydhk@yahoo.com
 146 Shepherd Lane
 Shepherdstown, West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Mary L. <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:07 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the future and general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Mary L.
mar3356@suddenlink.net
1002 Lee St.
Charleston, West Virginia 25323

Stacey Pfaltzgraff

From: Pamela Langland <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 6:49 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Ed and Pam Langland

Pamela Langland
 mollymcshabby@gmail.com
 5650 Charles Town Road
 Kearneysville, West Virginia 25430

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Ryan Lehman <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:56 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Ryan Lehman
rlehman90@gmail.com
35 Spillway Ct.
Martinsburg, West Virginia 25405

Stacey Pfaltzgraff

From: Nick Lento <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 11:36 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Nick Lento
nilent@gmail.com
500 Gorge Rd
Cliffside Park, New Jersey 07010

Stacey Pfaltzgraff

From: Laura Levesque <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 1:39 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

I can tell you personally that my family, which consists of two tax paying, working parents who commute East to good paying jobs for this region and one teenager in high school, will put our home on the market and move if this ordinance is passed. We don't want to raise our son in with this toxic threat to our health. I know of many other families that have this same intention, and those who have already been driven away from the community. This will be the legacy of the Ranson council's ill advised decision. Please vote no.

Thank you for your consideration.

Laura Levesque
unextinguished@gmail.com
154 High St
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Jane Levitan <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 9:03 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Now more than ever we MUST protect the respiratory health of our community. Experts agree that COVID 19 survival is linked to respiratory health diminished lung capacity leads to mortalities especially in older citizens.

Please use your authority to protect our health.

Thank you for your consideration

Respectfully,

Jane Levitan

Jane Levitan

jane.levitan@gmail.com

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

PO Box 1012
Shepherdstown , West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kevin Long <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:50 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson and also the area writ large, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents of the city and the entire area.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kevin Long
kevinclong@yahoo.com
633 S. Samuel St
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Conrad Lotze <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 6:34 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Conrad Lotze
clotze@hotmail.com
2237 Old Leetown Pike
Kearneysville, West Virginia 25430

Stacey Pfaltzgraff

From: Sofija Lotze <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:47 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sofija Lotze
sofizara20@gmail.com
2237 Old Leetown Pike
Kearneysville, West Virginia 25430

Stacey Pfaltzgraff

From: Brian Lowery <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 12:58 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Brian Lowery
illpass@comcast.net
93 shady acres lane
Kearneysville, West Virginia 25430-3582

Attachment: 20200623 - Written Comments - Packet #2 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kristina Maciunas <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:48 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kristina Maciunas
maciunas.kr@gmail.com
2237 Old Leetown Pike
Kearneysville, West Virginia 25430

Stacey Pfaltzgraff

From: Roberta Magee <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 9:58 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

I am a Citizen of Jefferson County and feel your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Roberta Magee
rmm711@gmail.com
688 Marsh Hawk Way
Shepherdstown. West Virginia 25443

Stacey Pfaltzgraff

From: Nancy Marmorella <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 1:52 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Nancy Marmorella
nmarmorella1@gmail.com
512 Undergrace Lane
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Sandra Marra <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 6:01 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sandra Marra
sandi_marra@msn.com
308 Union Street
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Ned Marshall <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 7:04 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

RANSON CITY COUNCIL 6/15/2020

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

This plant is closer to my home than it is to Ranson City Hall. So the particles and chemicals that will be spewed in great quantities will be especially concentrated here.

I have a compromised immune system from a double lung transplant, so this pollution is life threatening.

Here is a list of some of the pollutants that Rockwool claims the plant will put in our air:

Nitrogen Oxides-239 tons/year

Sulfur Dioxide-148 tons/year

Carbon Monoxide-74.1 tons/yr.

VOCs-472 tons/year

Particulate Matter:

Filterable-130 tons/year

<2.5 microns- 134tons/year

Formaldehyde- 67.6 tons/year

I am 73 years old and have lived here all my life.

THIS LIST SCARES THE PANTS OFF OF ME AND IT SHOULD FOR YOU TOO.

I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

Please reject Ordinance #2017-302

Thank you for your consideration.

Ned Marshall

nmarzk@gmail.com

589 Edgewood School Road

Shenandoah Junction, West Virginia 25442

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Ned Marshall <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 5:35 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Ned Marshall
nmarzk@gmail.com
589 Edgewood School Road
Shenandoah Junction, West Virginia 25442

Stacey Pfaltzgraff

From: Paul Mayhew <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 10:54 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

-Paul Mayhew
Harpers Ferry

Paul Mayhew
paulmayhew@frontiernet.net
P.O. Box 580
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Mark Mayo <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 5:07 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to express my strong opposition to the proposed Ordinance #2017-302. I implore you to protect the welfare of Ranson citizens and those living in surrounding Jefferson County by voting AGAINST this ordinance.

Heavy industry at the Jefferson Orchards site is NOT wanted. The allocation of an industrial zone can lead to detrimental effects to our local agriculture, tourism, nearby schools, as well as deteriorate air, land and water quality.

Your neighbors, children and the environment are counting on you to protect them. Please carefully consider the serious long term consequences of your actions and vote AGAINST Ordinance #2017-302, we can and must do better than this.

Mark Mayo

Mark Mayo
mark.angie@live.com
126 Valmont Lane
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Teresa McBee <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 1:29 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Teresa McBee
teresamcbee@gmail.com
186 Harmony Lane
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Doris Mcgillick <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 12:06 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of citizens.

Citizens come first. The Council Members and the Mayor's first responsibility is to the citizens of Ranson and remaining in harmony with the surrounding Jefferson County community. The Council should vote against this ordinance as it prioritizes the needs of Rockwool before the general welfare of the residents.

Heavy industry at the Jefferson Orchards site is not wanted. The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Doris Mcgillick

Doris Mcgillick
 mcgillickd@gmail.com
 42 Ferrell Alley
 Shenandoah junction , West Virginia 25442

Stacey Pfaltzgraff

From: NANCY McKeithen <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 1:02 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

NANCY McKeithen
nmckeithen@comcast.net
245 Timber Lane
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Danielle Meline <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 1:12 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Danielle Meline
sunshine.2191@icloud.com
201 Kearneysville pike
Kearneysville , West Virginia 25430

Stacey Pfaltzgraff

From: Christina Melocik <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 11:13 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Christina Melocik
chris.tiny@comcast.net
435 Craighill Dr.
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Jennifer Miller <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:23 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I strongly believe the passing of Ordinance #2017-302 prioritizes the needs of Industrial Rockwool over the general welfare of residents locally and in nearby states.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality. Why would we want such industry here?

Please Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you Very much for your consideration.

Jennifer Miller
pikemiller@msn.com
265 creekside lane
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Andrea Mitchell <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 8:17 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Andrea Mitchell
mom2mnl@gmail.com
28 May Ct.
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: JoAnne Monas <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:54 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

JoAnne Monas
msjoey05@aol.com
303 Lookout Mountain Court
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Damien Moody <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 12:03 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Damien Moody
audiodef11@gmail.com
39 Keets Brook Branch
Bernardston, Massachusetts 01337

Stacey Pfaltzgraff

From: Alvyce Moore <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 4:28 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Alvyce Moore
wvsoccermom@hotmail.com
3172 Ridge Road
Shenandoah Junction, West Virginia 25442

Stacey Pfaltzgraff

From: JL Moore <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:53 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to demand that you stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone will cause detrimental effects to the flourishing local agriculture, equine and tourism community, will impact nearby schools, and will deteriorate air, land and water quality.

Reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

You owe it to your constituents, because without us, you wouldn't be here.

JL Moore
from.jens.oen@gmail.com
PO box 233
Bernardston, Massachusetts 01337

Stacey Pfaltzgraff

From: Alison Morreale <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 10:38 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Alison Morreale
baltimorreale@gmail.com
75 Old Prospect Ave
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: David Morreale <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 8:21 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to ask that you vote "NO" to the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community. does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

David Morreale
davidmorreale@comcast.net
75 Old Prospect Ave
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Mark Muse <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 8:31 AM
To: Stacey Pfaltzgraff
Subject: Ordinance #2017-302

CAUTION: External Email

Stacey Pfaltzgraff,

My name is Mark Muse. I am a long-time resident of Jefferson County, WV.

In my considered opinion it is not too late to undo the corrupt actions taken by the Ranson government that permitted heavy industry to move into Jefferson County. Heavy industry has no place in this county, and particularly in that specific location where any kind of spill will endanger the groundwater that most of us rely upon for our household water.

There are many other concerns related specifically to Rockwool, that would likely apply to other heavy industry that might also locate on this site. No need to go into all of these here, I'm sure you have heard it before. But these are real issues. This is not just a NIMBY issue.

Sincerely,
Mark Muse

Mark Muse
1xmmuse@gmail.com
377 Knott Rd
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Mycookiemanager1296@gmail.com <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 11:35 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Mycookiemanager1296@gmail.com
783 Crosswinds Dr
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Suellen Myers <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 11:32 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Suellen Myers
willowsp@earthlink.net
PO Box31
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Sherri Neilson <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 7:00 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

It is an outrage to bring heavy industry to an area known for its scenic beauty and history. I've lived here 20 years, have asthma, enjoy the outdoors, and need my peaceful home to stay unpolluted -- air, water, earth, everything.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sherri Neilson
sherridn@aol.com
590 Hostler Road
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Ginger Oden <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:23 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Ginger Oden
gingeroden1@gmail.com
4192 Old Leetown Pike
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Jayne O'Hara <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 3:46 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jayne O'Hara
ladyjayne5@aol.com
111 Appomattox lane
Shepherdstown , West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jaime Olmstead <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 6:39 PM
To: Stacey Pfaltzgraff
Subject: Majorly Opposed to Heavy Industry in Jefferson County

CAUTION: External Email

Stacey Pfaltzgraff,

Please oppose the rezoning of the old orchard site to heavy industry. I believe our best future lies in preserving our ecology and promoting growth in housing and tourism.

I would no longer be proud to call this beautiful county my home, should you allow it to be pillaged and destroyed for a profit that doesn't even extend to those who will suffer most from its blight.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jaime Olmstead
awtumrain@gmail.com
92 Chadwick Drive
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Alex Orton <info@sg.actionnetwork.org>
Sent: Friday, June 12, 2020 12:50 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents of Jefferson County.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Alex Orton
aorton23@gmail.com
116 Wildwood Farm Lane
Shenandoah Junction, West Virginia 25442

Stacey Pfaltzgraff

From: Arlene Otzel <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 12:23 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Arlene Otzel
amotzel@msn.com
35720 Portrait Vista Lane
Purcellville, Virginia 20132

Stacey Pfaltzgraff

From: Preston Owen <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 6:26 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Preston Owen
pl_owen@icloud.com
584 Thumper Dr.
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Stephanie Pania <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:57 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

It is clear that the residents you're representing do not want this facility. It is clear that Rockwool is not what is best for our community and environmental health.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Stephanie Pania
plaidacid@yahoo.com
Bouldin rd
Charles town, West Virginia 25414

Stacey Pfaltzgraff

From: Kelly Pannill-Perkins <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 10:48 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kelly Pannill-Perkins
kpannill@gmail.com
80 Barley Ln
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Richard Parker <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 5:43 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Richard Parker
buds4223@comcast.net
619 Breckenridge Way
Shenandoah Junction , West Virginia 25442

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Pamela Parziale <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 5:26 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

To whom it may concern,

I served on Envision Jefferson 2035, a 15 member steering committee for the Jefferson County Comprehensive Plan. We met from 2012 to 2014. We had clear goals and responsibilities, as set forth by WV state law *8A-3-1. We concluded with a recommended list of priorities.

It reviewing the Ranson Comprehensive Plan, looking at the maps, rereading testimony to the Envision Committee, and reading my notes, the proposed Rockwool plant was not a part of the Ranson Comprehensive Plan.

<https://www.cityofransonwv.net/DocumentCenter/View/35/2012-Comprehensive-Plan>

Because of the actions taken by the Ranson City Council to short circuit the legal process and to allow Rockwool to proceed with its development, Ranson is now required by the courts to hold the necessary readings as required by state law. Most important, the City of Ranson, its town council and planning commission, did not follow its own master plan for Ranson. Their hasty actions and decision making are an insult to the memory of Ranson Mayor Hamill who served the city for 29 years and strongly supported the multi-use development in the area of Jefferson Orchards.

Looking at the map of the Ranson area, (attached) one sees a large white space. This is the area of Jefferson Orchards, now owned by Rockwool. As the Envision Committee met, monthly meetings over the course of almost 3 years, informational meetings of all kinds about the county's resources and future growth, this particular area was to be an urban center, shops and store fronts with apartments above, housing, and a stop for the MARC train. While

Stacey Pfaltzgraff

From: Jen Perrotte <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 9:06 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jen Perrotte
 jenniferkohhorst@hotmail.com
 45 Devon Way
 Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Phillip Perrotte <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 6:04 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Phillip Perrotte
pjpxff@yahoo.com
45 Devon Way
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Fred Petrosino <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:30 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Fred Petrosino
highpoint@rstarmail.com
36659 STONY POINT RD
HILLSBORO, Virginia 20132

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: charles peyton <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:59 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

charles peyton
cgpeyton@comcast.net
49 lee way
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Mark Pickens <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 11:46 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

What you do locally has ripple effects that affect your neighbors and fellow Americans. It also affects our perception of Ranson, as we look from a (small) distance.

Your choices also have ripple effects across time, affecting your children and grandchildren. Surely whatever gains rockwool claims to offer today aren't worth lifetimes of pollution and illness.

Mark Pickens
mwpickens@gmail.com
1706 Brookshire Run
Point of Rocks , Maryland 21777

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Chris Preperato <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 6:36 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Chris Preperato
chrispreperato@gmail.com
15705 Millbrook Lane
Laurel, Maryland 20707

Attachment: 20200623 - Written Comments - Packet #3 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Laura Prezzi <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 3:30 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwood over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Laura Prezzi
lprezzi38@gmail.com
12 Yellow Tavern Court
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Ana Prillaman <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 8:48 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Ana Prillaman
valaista@gmail.com
1665 Persimmon Lane
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Grant Prillaman <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 6:34 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

My name is Grant Prillaman. Our family farm is on Persimmon Lane, not far from Shepherdstown.

I am writing to ask that the Ranson City Council NOT re-enact its ill-conceived zoning of the Jefferson Orchards site, paving the way for further industrialization of the City and the County.

I am adamantly opposed to the Rockwool facility, and have long been appalled that Ranson gave up on a carefully crafted (and federally funded) plan for multi-use, transportation centered development of that site to attract a major polluter which depends on corporate welfare from both the State and the City. To facilitate the placement of more of this level of industry would be a slap in the face of every citizen in Jefferson County who wants to see sensible and appropriate economic development.

Our farm is bounded on the east by Rocky Marsh Run, a "feeder stream" for any water issues originating at Jefferson Orchards. The karst geology of the site, including its many sinkholes, makes this a parcel completely unsuitable for industrial development, and directly places our farm at risk. We raise produce and vegetable, pork and eggs. We work the gardens and fields with horses. Every animal and human on this farm is already at risk from Rockwool, and the possibility of adding other industrial operations is frightening.

Ranson does not really benefit from the further industrialization of Jefferson Orchards. This has always been a project pushed by the State, for the benefit of the State. Please stand up for your City and bury this rezoning.

Grant Prillaman
ghpwfms@hotmail.com

Stacey Pfaltzgraff

From: Lew Prillaman <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 1:03 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to ask that you vote NO on Ordinance #2017-302. This zoning change will allow for a development process that will significantly alter the robust agricultural and tourism-related industries operating in Jefferson County, as well as endanger the health, safety, and welfare of the community. Ordinance #2017-302 violates the premise of the smart code zoning that was secured via a concentrated citizen effort and the acquisition of federal funds.

I believe that you will receive many letters similar to mine, letters that outline the ways in which heavy industry located in Ranson, West Virginia would impact the whole of Jefferson County and all of its citizens. Ranson's Comprehensive Plan states that it is the duty of the municipality to ensure that new industry will not adversely affect the health, safety, or welfare of the community.

What has the Town of Ranson and its governing body to gain from this proposed zoning change, when the whole of the surrounding community faces the very real destabilizing consequences that increased pollution brings?

Please support all Jefferson County residents and businesses by voting NO on ordinance #2017-302.

Respectfully,
 Lew Prillaman

Lew Prillaman
 lew.prillaman@gmail.com
 1665 Persimmon Ln., Shepherdstown
 Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Richard Protzman <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 10:11 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Richard Protzman
richp9000@yahoo.com
19 Baltic Ln
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Kathleen Reid <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 4:06 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kathleen Reid
kathyreid1@me.com
4343 Engle Molers Rd.
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Donna Rhodes <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 10:54 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Donna Rhodes
zuzusptls2@outlook.com
120 Lookout Mountain Ct
harpers ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Patti Richardson <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 6:41 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Patti Richardson
b1pilotlover@yahoo.com
530 Declaration Drive
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Lynn Roberts <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 12:46 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Lynn Roberts
lynnisp@gmail.com
3008 old Leetown pike
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Deborah Rochefort <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 10:16 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Ranson City Council.

Please, please do not permit heavy industry rezoning at the Jefferson Orchards site. It should have never happened in the first place.

I would argue against heavy industry in general in Jefferson County, due to its primary agrarian and tourist industries, both of which are strongly adversely affected by heavy industry. However, placing an industrial zone on the site of the former Jefferson Orchards site is simply a disaster waiting to happen. Not merely that it could happen, but that it is almost certain a disaster **will** happen.

First, I will point out that the planned heavy industry is right next door to an elementary school, and within a five mile radius of a number of other schools, putting the health of many children (not to mention their teachers, families, etc.) at risk. There is no excuse for ignorance in this time, as we now see precisely how deadly air pollution is by the increased death from COVID-19 in regions that harbor air pollution, particularly from heavy industry. To permit a heavy polluter in this county is unconscionable.

Second, and of at least equal importance, no heavy industry should be allowed on karst geology, period, especially the unstable karst geology that exists on the Jefferson Orchards site. (You are probably thinking, 'oh, no, not someone talking about karst again' - but I'm a scientist, that's what I do. And it's important). The limestone that juts up in ridges all over our county land may be strong and dense, but it is subject to dissolution by dissolved carbon dioxide in rainwater (and by the way, acid rain from heavy industry would only accelerate the process.) This leads to a unique 'rocky sponge'-like environment of rock under the earth, which gives rise to micro and macro cave environments and connects many groundwater sources. There are several relevant consequences for this discussion:

1) The 'rocky sponge' can lead to instabilities, especially in a rapid influx of rain or storm waters, leading to collapse and formation of sink holes. The Jefferson Orchard site is a hotbed of sinkholes, as a quick look at its geology will tell you.

2)The number of cave environments in Jefferson County is unknown, however they are known to shelter rare and endangered species that would be severely at risk from heavy industry, particularly because --

3) our groundwater sources are all connected. An industrial contamination at a single site (say, Rockwool) would contaminate everyone's groundwater in Jefferson County. No amount of apology from city council members could ever make up for that. And finally

3)Rockwool really, really wants a gas line. Most gas companies know better than to try to put a gas line through karst, but apparently not here. You now know that there is a strong possibility of a sinkhole causing a contamination event. Now, just imagine a gas pipeline fracturing in a sinkhole event. Boom.

I am literally speaking of life and death here. (Why Rockwool did not do a land study before they decided on this site is beyond me.)

So in sum: don't do it. Do not pass Ordinance #2017-302. Reject this disastrous ordinance and vote NO on heavy industry in Jefferson County.

Thank you,
Dr. Deborah Rochefort

Deborah Rochefort
ballata@comcast.net
310 KAREN LN
SHENANDOAH JUNCTION, West Virginia 25442

Stacey Pfaltzgraff

From: Carolyn Rodis <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:28 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Carolyn Rodis
cjandrodis@yahoo.com
76 Shepherd Village Circle
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Timothy Ross <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 7:12 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Members of the Ranson City Council, Mayor Pierson and City Manager Tony Grant. My comments refer primarily to two paragraphs in the Request for Action prepared by Mr. Grant and your attorney. The paragraphs are below with my emphasis added. Please read them and then consider my questions in your deliberations:

"As required by law, the 2012 Comprehensive Plan Outlines the General Land Use Objectives, including

Objective #10: "Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community.

(Ranson, West Virginia Comprehensive Plan 2012, Page 31)"

The 2012 Plan identifies Jefferson Orchards as a prospective major development project:

"Jefferson Orchard. A proposed relocation of the Duffields MARC station and development of a Transit Oriented Development in an intended growth urban area. This area is also proposed for an Industrial Special Industrial District that would utilize the rail access. (Ranson, West Virginia Comprehensive Plan 2012, Page 30 & Appendix B)"

Your attorney said that you cannot consider statements concerning Air and Water because the city has no regulatory authority. If the city has no authority or ability to consider these factors then why is Objective #10 in your 2012 Comprehensive Plan? The plan clearly states that the "City...will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community." Neither the EPA or WV DEP evaluates the effect of pollution on crop yields, nor the impact of the hundreds of trucks serving Rockwool nor the impacts on our property values. These evaluations are your job and you have a duty to complete them.

The comprehensive plan says that the area is "proposed for an Industrial Special Industrial District that would utilize the rail access." Where is this rail access? Where is there anything stated that Rockwool will use this rail access? The whole purpose of the plan in respect to Jefferson Orchards was Northpoint Station. Where is it? It obviously no longer exists; this zoning does not comply with the comprehensive plan. Your staff is in error.

I find it interesting that your attorney stressed that the 14th Amendment to the United States Constitution prohibits you treating Rockwool differently from anyone else when the word Rockwool doesn't appear anywhere in the resolution. There is no way a citizen in 2017, nor even now, could know exactly the purpose of this Resolution. You fixed the error in the advertising in 2017. The participation you see is what happens when you have an informed citizen. You should listen to them no matter what your attorney advises.

The debacle that is Rockwool was brought to this county by many players, but where are they now? They have gone off to greener pastures leaving you to clean up their mess. They have left you to take full responsibility for the industrialization of Jefferson County. Let it be clear, this resolution isn't about Rockwool, it is about the establishment of a large industrial area in this county. The state wants it. Those that have left wanted it, and of course Rockwool wants it. Rockwool can fend for itself. Your job is to follow the Comprehensive Plan. Your job is to insure that industrial facilities do not adversely affect the health, safety, or welfare of the community. Do your job and think for yourself, and about yourself. Is the destruction of Jefferson County the legacy you want for yourself? Will this destruction be your platform the next time you run for office?

On the other hand, If you vote no you will be serving your citizens and neighbors well, and you should vote no. Do not think for one minute that by voting yes for this rezoning that Ranson's role in this debacle is over.

Thank you for considering my comments.

Timothy Ross
redross44@yahoo.com
1853 FLOWING SPRINGS Road
CHARLES TOWN, West Virginia 25414

Stacey Pfaltzgraff

From: Ted Schiltz <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:38 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Ted Schiltz
tlschiltz1@comcast.net
38 River Cliff Dr
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Tracy Seffers <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 8:25 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Tracy Seffers
tseffers@mail.com
1087 Avon Bend Rd
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Morgan Sell <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 5:54 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Morgan Sell
morgansell311@gmail.com
Po box 752
Shepherdstown, West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Anne Sentz <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 10:24 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Anne Sentz
aebaker06@gmail.com
35 Salvation Road
Martinsburg, West Virginia 25405

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Erin Shaw <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 11:18 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Erin Shaw
erinshaw19@gmail.com
1058 Uvilla Road
Harpers Ferry , West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Angela Sherman <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 2:52 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Angela Sherman
shermangela@gmail.com
304 Lookout Mountain CT.
Harper's Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Elizabeth Shockley <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 9:22 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Elizabeth Shockley
j4shock@frontiernet.net
1285 Bloomery Rd.
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: AE Silver <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 5:52 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Stop the destruction of this beautiful area we live in NOW!

Don't let greed win.

Thank you for your consideration.

AE Silver
aesilver@hotmail.com
667 Huyett Rd
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Sue Silver <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 9:55 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sue Silver
suesilver194@gmail.com
47 Old Prospect Ave
Shepherdstown, West Virginia 25443-0299

Stacey Pfaltzgraff

From: Michael Simms <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 12:33 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Michael Simms
msimms7727@outlook.com
73 Colonel Black Way
Charles Town , West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Amritpal Singh <info@sg.actionnetwork.org>
Sent: Thursday, June 11, 2020 12:20 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Amritpal Singh
palijatt@yahoo.com
193 rustling leaf pl
Kearneysville , West Virginia 25320

Stacey Pfaltzgraff

From: Dave Smith <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 9:17 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Dave Smith
drsmith58@frontiernet.net
34 Little Run Drive
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Kathleen Snow <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 9:42 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Kathleen Snow
ksnowaz@gmail.com
726 W Madero Circle
Mesa, Arizona 85210

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: F.R. Spencer <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 3:25 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

F.R. Spencer
thorville96@aol.com
759 Deer Mountain Drive
HARPERS FERRY, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: KARREN Spencer <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:27 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

KARREN Spencer
stwofor6and8@aol.com
759 Deer Mountain Dr
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Barbara Spicher <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 8:48 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Barbara Spicher
bspicher@frontiernet.net
1328 Terrapin Neck Rd
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Patricia Stephenson <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 1:09 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Patricia Stephenson
seekingpatricia@gmail.com
20704 St. Louis Rd
Purcellville , VA, Virginia 20132

Stacey Pfaltzgraff

From: Janet Stevens <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 9:26 AM
To: Stacey Pfaltzgraff
Subject: No Heavy industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to request that you lead & stand tall against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents, school children, and employees in the region. I worked for the U.S. Coast Guard for 30 years, saving lives. I volunteered at the elementary school across the street from the proposed site. Those kids' health and lives are valued. I speak for myself and my school partners. I speak for my former employees. We need clean air and water more than 150 jobs. More harm than good will result from this travesty. You think Covid-19 is bad; Imagine what you could do NOW to prevent harm to your family and others.

The allocation of an industrial zone will cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact our schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration. Keep the Eastern Panhandle safe and prosperous,
 Janet Stevens

Janet Stevens
 janet.e.stevens@outlook.com
 140 Mermaid Way
 Martinsburg, West Virginia 25405

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Juliette Stollings <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:00 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Juliette Stollings

Juliette Stollings
 heartsowngarden@gmail.com
 858 East Ganotown road
 gerrardstown , West Virginia 25420

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Michael Stoneback <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 12:06 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Michael Stoneback
m.stoneback@yahoo.com
10 Bouldin Rd.
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kathryn Super <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:51 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Feel free to call me at 3046161891 if you would want to speak directly with a constituent!

Thank you for your consideration.

Kathryn Super
ksuper@udel.edu
343 Ashley Drive
Shepherdstown, West Virginia 25443

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: William Telfair <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 10:23 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

The potential for drinking water contamination for most of Jefferson County is huge. It is when Willits happen, not if it will happen.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

William Telfair
wbchtelfair@sbcglobal.net
307 Rudder Road
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: William Telfair <info@sg.actionnetwork.org>
Sent: Tuesday, June 16, 2020 9:22 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

The contamination of the water supply for most of Jefferson county by Rockwool is a certainty - the Only question is when, not if.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

William Telfair
wbchtelfair@sbcglobal.net
307Rudder Road
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Tamara Salisbury Thompson <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 1:36 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Tamara Salisbury Thompson
Badmommie@hotmail.com
36 Gusty Court
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Marie Uehling <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 10:15 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

As a member of the Jefferson County Vision Board of Directors I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Richard Urban <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 1:12 PM
To: Stacey Pfaltzgraff
Subject: About Rockwool Rezoning

CAUTION: External Email

Stacey Pfaltzgraff,

Hi,

The original vision of the Jefferson Orchards property as mixed retail/residential was radically hijacked by bringing in heavy industry. This is a betrayal of the public welfare of our beautiful area. The process by which it was changed was not transparent at all. Most were not aware of these changes until they were already completed. Furthermore, this property is not even adjacent to the city of Ranson, making the whole process even more suspect. Who and what was behind this push to bring this heavy industry to our area?

In light of all this, it makes sense that this property not be zoned for heavy industry. Zoning it for heavy industry is not in the best interests of our beautiful and historic area.

Sincerely,

Richard Urban

Harpers Ferry/Shannondale

Richard Urban

richardurbanfamily@comcast.net

202 Cub Run Lane

Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Sheila Vertino <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 1:46 PM
To: Stacey Pfaltzgraff
Subject: VOTE No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Sheila Vertino
sheilavertino@yahoo.com
591 Steamboat Run Road
SHEPHERDSTOWN, West Virginia 25443

Stacey Pfaltzgraff

From: Meredith Wait <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 8:06 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Meredith Wait
meranddeb@frontiernet.net
3823 Shepherd Grade Rd.
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Michael Wallace <info@sg.actionnetwork.org>
Sent: Monday, June 15, 2020 10:28 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Note that I also own a home in Ranson, and I am considering selling both of my homes and leaving Ranson and Jefferson County as a result of this sordid behavior on the part of the Ranson City Council.

Thank you for your consideration.

Michael Wallace
wallacemf@aol.com
691 Woodbury Drive
Kearneysville, West Virginia 25430

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jody Walters <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 7:15 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Jody Walters
redwgn32@gmail.com
239 Symington Dr.
Martinsburg , Virginia 22406

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Diane Whitacre <info@sg.actionnetwork.org>
Sent: Wednesday, June 17, 2020 10:04 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Diane Whitacre
dianew25@comcast.net
25 Overbrook Rd
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Christine Whitman <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:04 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Christine Whitman
christinemlee99@yahoo.com
240 W Blakeley Dr
Charles Town, West Virginia 25414

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Richard Wickman <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 2:01 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Richard Wickman
rawickman@frontiernet.net
593 Shannondale Rd
Harpers Ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Amy Wing <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 9:42 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your responsibility is to the citizens of Ranson and the surrounding area.

Passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents would be a violation of the public trust and our well being as citizens.

The scientific evidence points to the fact that an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Sincerely,
Amy Wing

Amy Wing
ajw.habitat@gmail.com
109 Koncer Drive, Apt. #4
Martinsburg, West Virginia 25404

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: allen wight <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 12:57 PM
To: Stacey Pfaltzgraff
Subject: Pretty Please - No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

allen wight
allen.b.wight@gmail.com
325 deer ridge drive
harpers ferry, West Virginia 25425

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Assunta Wight <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 12:50 PM
To: Stacey Pfaltzgraff
Subject: No Heavy industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Assunta Wight
suziwight@gmail.com
325 Deer Ridge Drive
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Leslie Williams <info@sg.actionnetwork.org>
Sent: Saturday, June 13, 2020 2:16 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am a business owner operating in Jefferson County. I want Jefferson County to thrive economically, so I want to attract businesses to the area.

But Jefferson County will not thrive economically if its new businesses negate the County's existing assets: natural beauty, strong agriculture, deep history, peaceful way of life, vibrant culture and thriving tourism. Heavy industry is in direct opposition to all of these assets. Even more importantly, pollution poses a threat to the health of our people, land, and water.

Relying on heavy industry for economic growth shows a lack of imagination, a deficit of conscience, and a lack of will to preserve what is best about this area. It just has to be possible to grow the county in ways that are consistent with the Comprehensive Plan and that build upon, not destroys, the existing strengths of this county.

Judge Hammer's recent ruling allows you to reverse course on heavy industry, a strategy that will threaten the well-being of this county and its people. For this reason, I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site. Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Leslie Williams
 lesiewms1@gmail.com
 20 Sybil Court
 SHEPHERDSTOWN, West Virginia 25443

Stacey Pfaltzgraff

From: Mark Wilson <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 10:53 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Hello,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site. Resubmitting the zoning change is unethical and against your community's wishes.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Mark Wilson
mountaineer33@gmail.com
357 Lady Bug Ln
Kearneysville , Texas 25439

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Keegan Woche <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:07 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Keegan Woche
keeganwoche@gmail.com
584 Thumper Drive
Ranson, West Virginia 25438

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Pamela Wood <info@sg.actionnetwork.org>
Sent: Sunday, June 14, 2020 8:13 PM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, can impact nearby schools, and can deteriorate air, land and water quality.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Pamela Wood
pwood5@students.towson.edu
19730 frog eye Rd
Knoxville, Maryland 21758

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Michele Zenkowich <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 10:39 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

I am a resident of the Kabletown District of Charles Town, and I oppose the industrial reallocation of the Jefferson Orchards site on the zoning map. I did not move to Jefferson County only to see it become less rural, less tourism-friendly, less scenic, and less ecologically friendly.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

I stand with citizens of Ranson in opposing passage of Ordinance #2017-302.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

Attachment: 20200623 - Written Comments - Packet #4 (1685 : Ordinance #2017-302)

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Sincerely,

Michele Zenkowich

Michele Zenkowich
zenm1976@gmail.com
299 Westwoods Lane
Charles Town, West Virginia 25414

aff

Stephanie Aldridge <stephanie.anne.aldridge@gmail.com>
 Tuesday, June 9, 2020 4:11 PM
 Stacey Pfaltzgraff
 Faith Hendon
Subject: Written Comment on Proposed Ordinance #2017-302

CAUTION: External Email

My name is Stephanie Aldridge. I'm 35 years old, and I recently moved to Ranson in the Shenandoah Springs Community from Northern Virginia. I grew up in Herndon, which started as a sleepy town towards the end of a two lane road to the airport when I was born, and by the time I left, well, you all have been down there.

I was active in my community there, volunteering for many non-profits including the Council for the Arts of Herndon, chaired many fundraisers, and had an insider's view of planning commission, growth of the town, and issues facing the community because it was dinner time discussion as my mother worked for the Dranesville district supervisor for 12 years representing Herndon.

When I was looking to leave the state of Virginia I spent hours reading the comprehensive plans of cities and counties in the area. I looked at property values, and scouted the towns with my husband for growth, and where we thought the best place for us would be. Ranson was the winner by far. It had all the charm I remembered from early Herndon, but none of the things I disliked about Northern Virginia now. The only downside this area really had was this pesky little factory that was going in down the street.

Now, my husband is in the trades, so we understand the benefits of Rockwool. We get that there's a net carbon offset from the factory emissions when you look at the insulation benefits in all the homes the product provides. We also understand that compared to factories in the past, factories are much safer, with less emissions, and more oversight. After all, in a previous life my husband worked on oil rigs so he understands all about regulations and inspectors. (He also understands how often people get in the way of following those regulations and lie to the inspectors in the name of profit.)

Obviously, we picked Ranson even with this problem, and there may be other people who will as well. However, I'm writing now because you, Town Council, actually have a chance to fix this issue and lay it squarely on the shoulders of the residents and the legal process. You can take this public hearing and public notice, and say that you were so swamped with outrage over this, you can not, in good conscious rezone. You would be the heroes of the day! More than the day, perhaps the next 35 years!

I understand there's a ton of money that has passed hands at this juncture, and it's scary to turn your backs on such a thing. I get that Justice really wants this for the state as well. I have news for you though, you aren't beholden to EITHER of those aspects. You are beholden to us, and your legacy. Do you really want your legacy to be sick children, movies with Mark Ruffalo in 30 years about how you screwed the state, and a factory decreasing land values when that could have been rezoned to a winery that would have increased land values?

Listen, if you don't rezone it, Justice and Rockwool will move to another county in the state (maybe Hampshire or Morgan) who would love to have them. We'll still have 150 job growth in some other areas (especially in this new post COVID world where telecommuting is proven so effective) and we'll continue to grow intelligently to have beautiful landscapes, wonderful communities, and SMART development that blends our history with our future. We're not going to become Northern Virginia, but we're not going to become Pittsburgh/Richmond either.

It's in your hands, and you've been given the perfect escape route. Take it. For your legacy.

PS: If you're not going to do that, at least make Rockwool pay to move the school. It's ridiculous that we as a town are basically bending over for these people for 150 jobs that would have come here anyway because of the rate of urban sprawl from DC, you all know it, and I know it. Grow a spine. You are community leaders. Act like it.

Stephanie Aldridge
156 Shallow Creek Drive
Ranson, West Virginia

Stacey Pfaltzgraff

From: Douglas Allmond <dougallmond@icloud.com>
Sent: Tuesday, June 16, 2020 12:37 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that will significantly harm the municipalities within Jefferson County and beyond effecting the health, welfare, and safety of our community. Harpers Ferry is a national treasure with the natural and historic resources tours flock to see each year and one of the communities that will be negatively impacted by this zoning change.

According to a 2019 study by the West Virginia Tourism Office, Jefferson County generated an average of \$178 million per year in tourism-derived revenue for state and local governments over the last 10 years, more than any other county in West Virginia by at least double. Tourism benefits the businesses and economy of Ranson and Jefferson County producing \$213.7 million in individual earning, 7040 jobs, and \$842.6 million in direct spending here in 2018. We would need 40 Project Shuttles to replace the individual earnings and 59 Rockwools to replace the jobs provided by the tourism industry in Jefferson County. It is important to note that most of the money generated by tourism in Jefferson County comes from neighboring states. In this way, it is like an export: not simply recycling money, but bringing money into the state increasing its wealth. Much of the economy in Harpers Ferry is based on this tourism industry. A threat to this industry poses a threat to the economy and welfare of our community.

One of the important drivers for tourism in Harpers Ferry is the Appalachian Trail. According to the Appalachian Trail Conservancy (ATC), Harpers Ferry is the psychologic midpoint of the Trail, and hikers often plan extended stays in Jefferson County with an obvious positive impact. The ATC reports that the smokestacks and associated lights will be visible in the viewshed of 15 vistas on the Appalachian Trail (AT). Studies have shown that quality of vistas and human impact on the environment are not only noticed by visitors, but effect their experience. Another study published in the Journal of Applied Recreation Research, found that points of interests and views drew visitors' attention and had a significant impact on their perception of the trail. It was also found that particularly beautiful vistas helped visitors overlook elements that usually have a negative effect on trail experience like increased trail traffic. A 2009 study in Leisure Sciences revealed that scenic value was a perceptual theme of Appalachian Trail visitors, and that things as simple as dead trees visible in a vista can have a negative impact on visitors' overall perception. Imagine the effect the smokestacks will have from the 15 vistas from which they will be visible. The introduction of industrial activity made possible by the proposed rezoning in Ranson would have a negative effect on the scenic views of beautiful landscapes from the Appalachian Trail in Jefferson County.

The smokestacks are not all visitors will be able to see — the air pollution will create haze.

The effect of regional haze on tourists was explored in a review article published in the Atmospheric Environment titled "Impaired visibility: the air pollution people see." A key takeaway on the negative affect of haze on vacationing tourists was summarized as follows:

"Vacations offer an escape from the routine and stress of our daily lives. Vacation destinations are often chosen based on their scenery; vacations are spent gazing at monuments, mountains, clouds, and oceans. Good visibility allows clear observation of distant features and appreciation of the inherent beauty of these scenes...Air pollution, which is often present in both our cities and parks, interferes with these attributes and can ruin the views vacationers travel to enjoy."

People seek bucolic, unspoiled areas to escape the stresses of urban areas. A 2004 study in Environment and Behavior found perceived pollution causes stress while viewing natural scenes has both psychological and physiological benefits, and a 2007 study confirmed these benefits. Two other studies found that people are emotionally affected by poor visibility, and tourists are disappointed when views are obscured by haze.

The combination of smokestacks and haze will mar the viewshed and will not only reduce the positive effects of a scenic landscape but also leave tourists disappointed and dissatisfied with their choice of destination. With these effects the welfare of the Harpers Ferry community would undoubtedly be endangered by the industry that this zoning change will provide for.

Multiple studies by doctors Kozar, Doctor, and Doctor have demonstrated that the land at this site to be rezoned is Karst with the highest likelihood of sinkhole development in the county, and that the groundwater aquifer there is incredibly sensitive to contamination from surface water. Further, this site is on an upland plain with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. In this area contamination in surface water communicates easily to the water in the epikarst via diffuse and point infiltration, and the springs at the margins of the upland area are directly affected by the water quality throughout the aquifer. According to Jefferson Orchards Voluntary Remediation Plan with the WVDEP, the groundwater at the site is approximately 60 feet below the ground, and die tests performed by the USGS have shown that groundwater from just adjacent to this site emerged in the headwaters of both the Elk's Run and Rattlesnake Run. This is critically important for Harpers Ferry because the Elk's Run headwaters is a spring about three miles southeast of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River. The headwaters of Rattlesnake Run is a spring about 3.5 miles from the site and is also a tributary of the Potomac River. The Potomac River is the back up water source for Harpers Ferry. This means that the activity at the site will have a critical influence on the drinking water of Harpers Ferry. In this was the industry permitted by this change in zoning would undoubtedly endanger the health and safety of the community in Harpers Ferry.

The untoward health effects and individual economic consequences from the pollution emissions of the industry this rezoning will allow that will be born out over the length of people's lives and that of their decedents for at least three generations is an egregious example of environmental injustice that should not be tolerated. This zoning change may be in one of the poorest sections of the county, but the effects will be felt in every part of Ranson and the county.

In addition to the above the impact on the adjoining roads and the twenty four hour a day operation would have a devastating impact on the community. The constant noise and light pollution of a heavy industry operation would forever change the quality of life for our community.

The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." The industry that this rezoning will allow will jeopardize the health, safety and welfare of Ranson, Harpers Ferry and the whole county. Please vote no on the ordinance #2017-302.

Sincerely, Douglas Allmond

--
Douglas Allmond
dougallmond@icloud.com
Harpers Ferry 25425

Stacey Pfaltzgraff

From: Debra Anderson <hulagn@icloud.com>
Sent: Tuesday, June 16, 2020 7:15 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Debra Anderson
hulagn@icloud.com
Shenandoah Junction 25442

Stacey Pfaltzgraff

From: Stephen Ayraud <salias1@mac.com>
Sent: Monday, June 15, 2020 2:42 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us;
scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please oppose the rezoning of the subject property for the followings reason:

Industrial use is incompatible with the adjacent Jefferson County rural usage.

Sincerely,
Steve Ayraud

--
Stephen Ayraud
salias1@mac.com
Shepherdstown 25443

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: B.C. Baker <bcbaker3@comcast.net>
Sent: Tuesday, June 16, 2020 7:50 AM
To: Stacey Pfaltzgraff
Subject: Strong Opposition to RockWool

CAUTION: External Email

Good morning,

My name is Burzie Baker. We moved our family to beautiful Jefferson County WV on June 14, 2019. A lot went into our decision to move to the especially after I lived here some years back and just loved the area. We carefully chose Charles Town due to the quaintness of the area and the serene environment.

Shortly after moving here, we became aware of the Rock Wool situation and started following it closely. Needless to say, we were disheartened to learn of the rezoned portions of the Jefferson Orchards property to industrial use so that Rockwool North America could move into the area, set up shop, and wreak havoc on the health of all Jefferson County residents.

It is our understanding that the City of Ranson is looking to correct mistakes that were made in 2017 with the rezoning. I hope that is your intentions, since that would be the ethical thing to do in this situation.

As mentioned earlier, we chose this area for the environment. We have two small grandchildren with two more on the way. In no way, do I want them exposed to a toxic environment. The citizens of Jefferson County should come first...plain and simple. The Mayor of Ranson and the City Council members owe it to the citizens of all Jefferson County communities to vote against the ordinance as it clearly places the priorities of Rockwool before the health and welfare of the residents of Jefferson County.

I mention health and welfare being impacted because this rezoning will negatively impact local our farms, livestock, equine, schools, tourism as it impacts our land, air and water quality.

Again, I urge the city counsel of Ranson to consider these concerns and vote against the ordinance and keep Jefferson County beautiful. As a Council Member...is this what you want to be known for? Not standing up for the citizens of Jefferson County? Please vote against the ordinance.

If you have any questions or concerns regarding this email plea, please reply. I'd be glad to provide additional insight.

Sincerely,

Burzie C. Baker III

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: WENDY BAKER <wabaker68@comcast.net>
Sent: Sunday, June 14, 2020 11:34 AM
To: Stacey Pfaltzgraff
Subject: Strong Opposition to RockWool

CAUTION: External Email

Good morning,

My name is Wendy Baker. We moved our family to beautiful Jefferson County WV on June 14, 2019. A lot went into our decision to move to the area after being a resident of MD for 51 years. We carefully chose Charles Town due to the quaintness of the area and the serene environment.

Shortly after moving here, we became aware of the Rock Wool situation and started following it closely. Needless to say, we were disheartened to learn of the rezoned portions of the Jefferson Orchards property to industrial use so that Rockwool North America could move into the area, set up shop, and wreak havoc on the health of all Jefferson County residents.

It is our understanding that the City of Ranson is looking to correct mistakes that were made in 2017 with the rezoning.

As mentioned earlier, we chose this area for the environment. We have two small grandchildren with two more on the way. In no way, do I want them exposed to a toxic environment. The citizens of Jefferson County should come first...plain and simple. The Mayor of Ranson and the City Council members owe it to the citizens of all Jefferson County communities to vote against the ordinance as it clearly places the priorities of Rockwool before the health and welfare of the residents of Jefferson County.

I mention health and welfare being impacted because this rezoning will negatively impact local our farms, livestock, equine, schools, tourism as it impacts our land, air and water quality.

Again, I urge the city counsel of Ranson to consider these concerns and vote against the ordinance and keep Jefferson County beautiful. As a Council Member...is this what you want to be known for? Not standing up for the citizens of Jefferson County? Please vote against the ordinance.

If you have any questions or concerns regarding this email plea, please reply. I'd be glad to provide additional insight.

Kind Regards,

Wendy Baker

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Randall Ball <bassmun73@gmail.com>
Sent: Wednesday, June 17, 2020 1:15 PM
To: Stacey Pfaltzgraff
Subject: Developing/Rezoning Opposition

CAUTION: External Email

Hello,

I just wanted to take a minute of your time to let you know that I'm opposed to further development/rezoning of Jefferson Orchards.

Thank You,
Randall Ball
(304)820-8268

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

ROBERT BARRAT
293 AMERICANA LANE
SHENANDOAH JUNCTION WV 25442
TEL 304 995 1006, RBARRAT@EARTHLINK.NET

Stacy A Dodson Pfaltzgraff
 City of Ranson Clerk
 Ranson City Hall
 312 South Mildred St
 Ranson WV 25438

June 11, 2020

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Dear Stacy:

Please include this letter in the written comments section of the hearings on Rockwool. I would ask all the city counselpersons and Mayor to please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the

The proposed ordinance is intended to address the issue of...
 The ordinance is necessary to ensure that...
 The ordinance is consistent with the city's...
 The ordinance is in the best interests of the community...

The ordinance is necessary to ensure that...
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 The ordinance is consistent with the city's...
 The ordinance is in the best interests of the community...

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302. Please call me anytime to discuss further. Thanks for your consideration.

Sincerely,



Robert Barrat
Tel 304 995 1006

Faint, illegible text at the top of the page, possibly bleed-through from the reverse side.

Second block of faint, illegible text below the first block.

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: John Barrat <barratj522@gmail.com>
Sent: Monday, June 15, 2020 12:49 PM
To: Stacey Pfaltzgraff
Subject: Written Comment Regarding Public of Ranson City Council to consider Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1:..."

Attachments: Exposure to ambient air pollution and the incidence of lung cancer and breast cancer in the Ontario Population.pdf

CAUTION: External Email

Monday, June 15, 2020

Ranson City Council
 Ranson City Hall
 312 S. Mildred St.
 Ranson, WV 25438

Dear Members of the Ranson City Council,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

With this letter I am enclosing a recent study (Published July 15, 2019) from the International Journal of Cancer. Its title is: "Exposure to ambient air pollution and the incidence of lung cancer and breast cancer in the Ontario Population Health and Environment Cohort." (Here is a link to the paper's abstract:

<https://pubmed.ncbi.nlm.nih.gov/31304979/> A full PDF copy of the paper is attached to this e-mail.)

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

To summarize this study which is extremely relevant to the rezoning issue before you:

Ontario is a province in Canada that has some of the lowest air pollution in the world. In this study the paper's authors did two simple things:

1. They obtained remote sensing images taken by satellite of ground level concentrations of ambient fine particulate matter (PM_{2.5}) being emitted from various sources in Ontario. PM_{2.5} are particles smaller than 2.5 micrometers and measure about 3 percent the diameter of a human hair. Particles in the PM_{2.5} size range are able to travel deeply into the respiratory tract, reaching the lungs. The PM_{2.5} particles in the satellite images were ambient or airborne and the images were used to calculate the varying PM_{2.5} levels in the air for each residential postal code region in Ontario during the years 2001 to 2015. The sources of this air pollution included residential fuel and wood burning, industry, transportation, wildfires, agriculture and power generation.
2. Using data from the Ontario Population Health and Environment Cohort and the Ontario Cancer Registry, the researchers next identified long-term Ontario residents ages 35-85 who had developed lung cancer during the period from 2001 to 2015. The study encompassed a total of 4,952,022 residents registered under Ontario's provincial health insurance plan. They then matched the Ontario residents who had developed lung cancer to the postal codes in which they lived.

The two sets of data revealed a direct association between Ontario residents who developed lung cancer and the postal codes showing the highest levels of ambient PM_{2.5} concentrations in the satellite images.

According to Li Bai, lead author of the study and senior epidemiologist at the Institute for Clinical Evaluative Sciences in Toronto: "Our findings show that long-term exposure to PM_{2.5} even at the relatively low level of exposure seen in Ontario, continues to be associated with increased risk of lung cancer."

This study also found the same correlation with a second pollutant that the scientists also imaged by satellite: nitrogen dioxide (NO₂).

By Rockwool's own admission, both PM 2.5 and NO₂ will be emitted in large concentrations from their exhaust stacks in Ranson should Ranson pass this rezoning and allow the Rockwool facility to proceed. These cancer causing toxins will be breathed into the lungs of the residents of Jefferson County and cause lung cancer to rise among the residents of Jefferson County.

As a Ranson City Council member your first responsibility is to the health and safety of the citizens of Ranson. This study is documented proof that the toxins Rockwool will dump into Jefferson County's air causes lung cancer. As such, you must reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Sincerely,

John D. Barrat
260 Falling Springs Road/P.O. Box 1622
Shepherdstown, WV 25443
(304) 266-1980

The following table shows the results of the survey conducted on 11/14/17. The survey was conducted by the City of St. Louis, Missouri, and the results are as follows:

Question	Response
1. How satisfied are you with the current state of the city?	Not Satisfied
2. How satisfied are you with the current state of the city?	Satisfied
3. How satisfied are you with the current state of the city?	Not Satisfied
4. How satisfied are you with the current state of the city?	Satisfied
5. How satisfied are you with the current state of the city?	Not Satisfied
6. How satisfied are you with the current state of the city?	Satisfied
7. How satisfied are you with the current state of the city?	Not Satisfied
8. How satisfied are you with the current state of the city?	Satisfied
9. How satisfied are you with the current state of the city?	Not Satisfied
10. How satisfied are you with the current state of the city?	Satisfied
11. How satisfied are you with the current state of the city?	Not Satisfied
12. How satisfied are you with the current state of the city?	Satisfied
13. How satisfied are you with the current state of the city?	Not Satisfied
14. How satisfied are you with the current state of the city?	Satisfied
15. How satisfied are you with the current state of the city?	Not Satisfied
16. How satisfied are you with the current state of the city?	Satisfied
17. How satisfied are you with the current state of the city?	Not Satisfied
18. How satisfied are you with the current state of the city?	Satisfied
19. How satisfied are you with the current state of the city?	Not Satisfied
20. How satisfied are you with the current state of the city?	Satisfied

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)



Exposure to ambient air pollution and the incidence of lung cancer and breast cancer in the Ontario Population Health and Environment Cohort

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Lung and female breast cancers are highly prevalent worldwide. Although the association between exposure to ambient fine particulate matter (PM_{2.5}) and lung cancer has been recognized, there is less evidence for associations with other common air pollutants such as nitrogen dioxide (NO₂) and ozone (O₃). Even less is known about potential associations between these pollutants and breast cancer. We conducted a population-based cohort study to investigate the associations of chronic exposure to PM_{2.5}, NO₂, O₃ and redox-weighted average of NO₂ and O₃ (O_x) with incident lung and breast cancer, using the Ontario Population Health and Environment Cohort (ONPHEC), which includes all long-term residents aged 35–85 years who lived in Ontario, Canada, 2001–2015. Incident lung and breast cancers were ascertained using the Ontario Cancer Registry. Annual estimates of exposures were assigned to the residential postal codes of subjects for each year during follow-up. We used Cox proportional-hazards models adjusting for personal- and neighborhood-level covariates. Our cohorts for lung and breast cancer analyses included ~4.9 million individuals and ~2.5 million women, respectively. During follow-up, 100,146 incident cases of lung cancer and 91,146 incident cases of breast cancer were diagnosed. The fully adjusted analyses showed positive associations of lung cancer incidence with PM_{2.5} (hazard ratio [HR] = 1.02 [95% CI: 1.01–1.05] per 5.3 µg/m³) and NO₂ (HR = 1.05 [95% CI: 1.03–1.07] per 14 ppb). No associations with lung cancer were observed for O₃ or O_x. Relationships between PM_{2.5} and NO₂ with lung cancer exhibited a sublinear shape. We did not find compelling evidence linking air pollution to breast cancer.

Additional Supporting Information may be found in the online version of this article.

Key words: incidence, lung cancer, breast cancer, ambient air pollution

Abbreviations: CCHS: Canadian Community Health Survey; CI: confidence interval; COPD: chronic obstructive pulmonary disease; HR: hazard ratio; ICD-O-3: International Classification of Diseases for Oncology; IQR: interquartile range; LUR: land use regression; NO₂: nitrogen dioxide; O₃: ozone; ONPHEC: Ontario Population Health and Environment Cohort; O_x: combined oxidant capacity of nitrogen dioxide and ozone; PM_{2.5}: fine particulate matter

Conflicts of interest: The authors declare they have no competing financial interests.

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What's new?

Although exposure to ambient fine particulate matter has been associated with lung cancer, there is less evidence for associations with other common air pollutants such as NO₂ and O₃. Even less is known about potential associations between these pollutants and breast cancer. In this large population-based cohort study in Ontario, Canada, exposures to PM_{2.5} and NO₂ but not O₃ were associated with increased lung cancer incidence. Using a newly developed class of concentration-response models, the authors observed sublinear relationships of PM_{2.5} and NO₂ with lung cancer. No strong evidence of a relationship between air pollutants and breast cancer was observed.

Introduction

Lung and breast cancer are the two most common types of cancer worldwide in terms of incidence.¹ Globally, approximately 2.1 million diagnoses were reported in 2018 for each of these two cancers, together contributing to ~11.6% of total cancer incidence.¹ Lung and breast cancer also rank as the first and fifth leading causes of cancer death, respectively.¹ Mounting evidence has shown that the development of lung cancer was linked to long-term exposure to ambient air pollution.^{2,3} Specifically, the International Agency for Research on Cancer (IARC) has classified outdoor particulate matter and overall air pollution as Group I human carcinogens.⁴ However, epidemiological evidence has been unclear for the associations of incident lung cancer with other common air pollutants such as nitrogen dioxide (NO₂) and ozone (O₃). Only a handful of studies have evaluated the impact of exposure to NO₂ on lung cancer incidence: an increased risk of lung cancer with NO₂ was reported in some studies,⁵⁻⁷ but not in others.^{8,9} Less evidence is available about the association between O₃ and lung cancer incidence with three studies published to date: one reported a positive association,¹⁰ but no association was observed in the other two studies.^{7,11} Since these gaseous pollutants often arise from different sources than those for particulate matter, a better elucidation of their possible associations with lung cancer can inform future interventions.

Apart from lung cancer, experimental studies have illustrated that air pollution may induce oxidative DNA-damaging and estrogen-disrupting effects. These effects may potentially increase the risk for breast cancer,^{12,13} but current epidemiological evidence on chronic exposure to air pollution and the incidence of breast cancer is scarce and inconsistent. For example, positive and statistically significant associations with PM_{2.5} or NO₂ were reported in four studies,¹⁴⁻¹⁷ whereas null associations were found in others.¹⁸⁻²¹ Additionally, less is known about whether exposure to oxidant gases (e.g., NO₂ and O₃) may modify the risk for breast cancer in association with PM_{2.5}.

Using the Ontario Population Health and Environment Cohort (ONPHEC),²² we conducted a large population-based cohort study to evaluate the risks of incident lung cancer and breast cancer in relation to long-term exposure to PM_{2.5}, NO₂ and O₃ in Ontario, Canada. In light of the inextricably chemical conjunction between O₃ and NO₂, we further considered a novel measure of the combined oxidant capacity of NO₂ and

O₃ (referred to as O_x). Because the concentrations of air pollution in Ontario are among the lowest in the world, our study constituted a valuable opportunity to investigate the impact of air pollution on cancer risks at low levels of exposure.

Materials and Methods**Study population**

The ONPHEC cohort comprises all long-term residents who lived in Ontario and were registered with Ontario's provincial health insurance plan on April 1, 1996.²² It was established to evaluate the risk of chronic diseases related to environmental risk factors by linking multiple large-scale population-based health administrative databases to environmental data. In Ontario, hospital and physician services are funded by the provincial government through a single-payer universal healthcare system that covers virtually all residents.²² We restricted the study cohort to individuals aged 35–85 years with no previous diagnosis of cancer at baseline (April 1, 2001). We further restricted the cohort used for studying incidence breast cancer to females only. Use of the data in our study was authorized under section 45 of Ontario's Personal Health Information Protection Act, which does not require review by a Research Ethics Board.

Case ascertainment

We ascertained incident cases of lung cancer and breast cancer during the study period (2001–2015) using the Ontario Cancer Registry. The Ontario Cancer Registry captures diagnostic and demographic information on all Ontario residents who have been newly diagnosed with cancer (i.e., incident cases). This registry continually collects cancer data to produce timely and high-quality information on the burden of cancer in the province. The data sources include: (i) records of hospitalizations and day surgeries that include a diagnosis of cancer; (ii) pathology reports with any mention of cancer; (iii) records of patients referred to cancer treatment centers; and (iv) death certificates with cancer recorded as the underlying cause of death. The International Classification of Diseases for Oncology (ICD-O-3) codes for lung and breast cancers are presented in Supporting Information Table S1.

Covariates

We considered age at baseline, sex (only for the lung cancer cohort) and four time-varying neighborhood-level covariates,

including income quintile (a measure of income adjusted to household size), the percentage of the population aged ≥ 15 years with less than high school education, unemployment rate and the percentage of recent immigrants (arrived in the 5 years prior to census), using 1996, 2001, 2006 and 2011 Canadian Census Dissemination data.

Several additional covariates at baseline included: (i) a dichotomous variable classifying Ontario into the Greater Toronto Area, a densely populated urban mega-region, and all other areas; (ii) two indicators of north/south and rural/urban (defined using as Rurality Index for Ontario score [large urban: 0–9; small urban: 10–40; rural: 40+]) to control for possible regional differences in the incidence of lung and breast cancers; (iii) area-level deprivation based on the Ontario Marginalization Index, which quantifies the degree of marginalization between areas and inequalities in health and social well-being in Ontario;²³ and (iv) access to health care using the ICES Physician Database which contains yearly information about all physicians in Ontario.²⁴ Furthermore, we selected four comorbidities (hypertension, diabetes, chronic obstructive pulmonary disease [COPD] and asthma) which have been previously related to individual-level lifestyle based on hospitalization and physician claims data (ICD-9 and ICD-10 diagnosis codes are listed in Supporting Information Table S1).

All datasets were linked using unique encoded identifiers and analyzed at ICES.

Exposure assessment

We derived estimates of ground-level $PM_{2.5}$ by relating satellite retrievals of aerosol optical depth, a measure of light extinction by aerosols in the total atmospheric column, to $PM_{2.5}$ using a global atmospheric chemical transport model (GEOS-Chem CTM), combined with a geographically weighted regression model. Details about this model have been reported previously.^{25,26} Briefly, covering all of North America below 70°N, which includes all of Ontario, the $PM_{2.5}$ estimates were available on a grid with a spatial resolution of approximately 1 km \times 1 km for each year between 1998 and 2012. These annual estimates of $PM_{2.5}$ were strongly correlated with ground-level monitoring data across North America ($R^2 = 0.82$). These data have been used in recent cohort studies assessing the health effects of long-term $PM_{2.5}$ exposure.^{27,28}

Residential exposure to NO_2 was derived from a national land-use regression (LUR) model developed using measurements of NO_2 at the fixed-site stations of Environment Canada's National Air Pollution Surveillance Network. Details about the model have been reported previously.²⁹ Briefly, this model includes 2005–2011 satellite NO_2 estimates, road length within 10 km, area of industrial land use within 2 km and mean summer rainfall. This model explained 73% of the variability in NO_2 measurements at fixed-site monitors with a root mean square error of 2.9 parts per billion. The NO_2 estimates from this model have been applied previously to

examine associations of traffic-related air pollution with mortality.²⁷

We used a surface of O_3 representing the average of the daily 8-hr maximum concentrations during the warm seasons (May 1 to October 31) from 2002 to 2009 across North America through multiyear objective analyses.³⁰ This surface (at a resolution of 21 \times 21 km) was developed using air quality model outputs from the Canadian and Hemispheric Regional Ozone and NO_x System model for the period 2002–2009.³¹

Since our exposure surfaces were available for certain periods of time ($PM_{2.5}$: 1998–2012; NO_2 : 2006; O_3 : 2002–2009), we conducted yearly calibration of these surfaces to relevant time periods during the study. Briefly, we extrapolated $PM_{2.5}$ estimates in 1998 annually to 1994–1997 by scaling the 1998 surface with a ratio between the average concentrations of $PM_{2.5}$ at all fixed-site monitors across Ontario in a given year in 1994–1997 and that in 1998. We also extrapolated $PM_{2.5}$ estimates to 2013–2015 by scaling the data in 2012. Similarly, we created annual mean estimates of NO_2 and O_3 between 1994 and 2015 by scaling their respective exposure surfaces. These calibration approaches enabled us to assign annual estimates of exposure to the centroid of each subject's annual six-character residential postal code in that year, thereby accounting for residential mobility and long-term trends in exposure. The postal code information was obtained from the Registered Persons Database, a registry of all Ontario residents with health insurance.

Finally, we considered the combined oxidant capacity of O_3 and NO_2 . Because O_3 and NO_2 can form a dynamic relationship through atmospheric chemistry and interchange over a timescale from minutes to days,³² it is important to understand whether the health effects of their combined oxidant capacity could be different from their effects individually. In our study, we calculated the combined oxidant capacity of O_3 and NO_2 using their redox-weighted average (O_x ; i.e., $O_x = [(1.07 \times NO_2) + (2.075 \times O_3)]/3.145$), as has been done previously.³³

Statistical analysis

Main analyses. We estimated the associations of incident lung and breast cancer with $PM_{2.5}$, NO_2 , O_3 and O_x using Cox proportional-hazards models with time-on-study as the time-scale. Continuous measures of long-term exposures to these air pollutants were fitted in the models as time-varying variables using a 3-year moving average with a 4-year time lag for each pollutant (i.e., the most recent 4 years were excluded from the moving average exposure).^{34,35} Follow-up ended when participants died, became ineligible for provincial health insurance (i.e., migration out of Ontario), or reached the end of follow-up (December 31, 2015). We also calculated time-varying neighborhood-level variables from the closest census year (i.e., 1996, 2001, 2006 or 2011). These time-varying contextual covariates were assigned to the centroid of each

subject's annual residential postal code in that year. We incrementally adjusted our models for a series of covariates including baseline age, sex (for lung cancer only), urban/rural residency, a north/south indicator and the four time-varying neighborhood-level variables. All models were stratified by region (living in Toronto or not) at baseline. We conducted subgroup analyses to investigate potential effect modification by age group (35–44, 45–54, 55–64, 65–74 and 75–85 years), sex (for lung cancer only), income level and selected comorbidities. Because we lacked information on menopausal status (a known risk factor for breast cancer) and the average age of menopause in Canada is 51 years, we conducted an additional stratified analysis by using 51 years as a cutoff to investigate whether there are potential differences for pre/postmenopausal breast cancer risk in relation to air pollution. All hazard ratios (HRs) and 95% confidence intervals (CIs) were expressed per interquartile range (IQR) increase in air pollution concentrations.

Sensitivity analyses. A series of sensitivity analyses were conducted to test the robustness of our results. Specifically, we further adjusted our models for selected comorbidities, area-level deprivation based on the Ontario Marginalization Index, and accessibility to health care. Additionally, we evaluated the impact of including a frailty term for census divisions (equivalent to counties) to account for any unmeasured spatial patterns at the census division level that may be associated with both exposure and outcomes.

Because individual-level socioeconomic and behavioral variables such as smoking and obesity were unavailable for our cohorts but are known to affect cancer risk, we further conducted an indirect adjustment analysis to account for potential confounding by smoking habits, obesity, physical activity, and alcohol drinking.³⁶ Briefly, this method was developed to adjust observed HRs for a series of risk factors unavailable in the dataset at hand, while simultaneously controlling for the risk factors included in the survival model (e.g., neighborhood-level covariates in our study). The method requires estimates of the linear associations between the variables included in the survival models and the variables indirectly adjusted for. To derive these associations, we used data from the 2001, 2003, 2005 and 2007 cycles of the Canadian Community Health Survey (CCHS) in Ontario. The population characteristics of the CCHS cohort used for indirect adjustment were similar to our study populations (e.g., mean age of 54.1 years and hypertension prevalence of 27.8%).

Furthermore, to assess whether our results were robust to three other risk factors for breast cancer: age at first full-term pregnancy, number of full-term pregnancies, and history of hormonal replacement therapy (i.e., intake of hormonal medications such as estrogens and progestogens),³⁷ we conducted two additional sensitivity analyses among subpopulations. First, we further adjusted for age at first full-term pregnancy and the number of full-term pregnancies among younger

women aged 35–39 years, due to a limitation that our pregnancy data were available since 1988 and thus we were unable to identify pregnancies for older women. Second, we further adjusted for history of hormonal replacement therapy prior to baseline among women aged 65 years and older, given that the universal Ontario Drug Benefit program covers prescription drug for residents aged 65+ years only.

Concentration–response relationship. We examined the shapes of the concentration–response relationships for the significant results observed in the main analysis. In doing this, we used shape constrained health impact function.³⁸ This method not only captures various shapes of the relationships between ambient air pollution exposure and cancer incidence (including linear, log-linear, threshold and variations on sigmoidal shapes) that were extensively considered in previous cohort studies of air pollution but yields the shapes suitable for health impact assessment. This was achieved by using the product of either a linear or log-linear function of air pollution concentration multiplied by a logistic weighting function, yielding a large number of flexible risk functions that can be fitted to survival models. Uncertainty in the risk functions is quantified using simulation methods. An ensemble model was derived by a weighted average of all the shapes of associations examined, with weights defined by the likelihood function values. This approach is increasingly used in large cohort studies to determine the shape of the concentration–response relationships between various health outcomes and air pollution.^{39,40}

Data availability

The dataset from our study is held securely in the coded form at ICES. While data sharing agreements prohibit ICES from making the dataset publicly available, access may be granted to those who meet prespecified criteria for confidential access, available at www.ices.on.ca/DAS. The full dataset creation plan and underlying analytic code are available from the authors upon request, understanding that the computer programs may rely upon coding templates or macros that are unique to ICES and are therefore either inaccessible or may require modification.

Results

Our study included a total of 4,952,022 eligible participants in the cohort free of any types of cancer at baseline (referred to as the lung cancer cohort); of these, 2,564,340 were female (referred to as the breast cancer cohort; Table 1). For both cohorts, participants had a mean age of approximately 53 years and approximately 26% had hypertension at baseline. The neighborhood-level socioeconomic status of the members was similar between the two cohorts. In total, 100,146 incident cases of lung cancer (or ~2.0% of the lung cancer cohort) and 91,146 incident cases of breast cancer (~3.6% of the breast cancer cohort) were diagnosed over the follow-up period.

Compared to the entire cohorts, these cancer patients were older and more likely to have selected comorbid conditions at baseline (Table 1).

For both cohorts, the average baseline exposures to PM_{2.5}, NO₂, O₃ and O_x were 10.8 µg/m³ (IQR: 5.3 µg/m³), 17.9 ppb (IQR: 13.9 ppb), 43.4 ppb (IQR: 8.2 ppb) and 35.0 ppb (IQR: 3.3 ppb), respectively (Supporting Information Table S2). Exposure to PM_{2.5} was modestly correlated with NO₂ (Pearson correlation coefficient, $r = 0.4$), O₃ ($r = 0.2$) and O_x ($r = 0.4$). In addition, O₃ was inversely correlated with NO₂ ($r = -0.4$). We also presented the distributions and correlations between selected air pollutants, incidence rate (the number of new cases per person-year) and neighborhood covariates at postal-code level during the study period from 2011 to 2015 (Supporting Information Tables S3 and S4).

None of four selected air pollutants was associated with lung cancer incidence in the basic models that only adjusted for age and sex and stratified by region (Table 2). Further incrementally adjusting for other covariates (i.e., neighborhood-level variables, urban residency and a north/south indicator), however, strengthened its associations with PM_{2.5} and NO₂. In the fully adjusted models, the estimated HRs for incident lung cancer corresponding to each IQR increase in exposure were 1.02 (95% CI: 1.01–1.05) for PM_{2.5}, 1.05 (95% CI: 1.03–1.07) for NO₂, 0.97 (95% CI: 0.96–0.98) for O₃ and 0.99 (95% CI: 0.98–1.00) for O_x, respectively. The magnitudes of these associations were robust to various sensitivity analyses considered, including indirect adjustment for smoking, obesity, alcohol drinking, and physical activity (Table 2). More details about the indirect adjustment (e.g., the associations between

Table 1. Baseline characteristics of the study population, by outcome

	Lung cancer cohort		Breast cancer cohort	
	Entire cohort	Incident cases of lung cancer	Entire cohort	Incident cases of breast cancer
	4,952,022	100,146	2,564,340	91,146
<i>Demographic characteristics</i>				
Age, mean (standard deviation), years	53.1 (13.0)	62.1 (10.8)	53.7 (13.4)	56.4 (12.3)
Sex (%)				
Male	48.2	53.0	0.0	0.0
Female	51.8	47.0	100.0	100.0
Income quintile (%)				
Lowest	17.2	22.9	17.3	16.3
Lower	19.9	22.3	20.0	19.6
Middle	20.5	20.2	20.5	20.3
Upper	20.6	17.7	20.4	20.6
Uppermost	21.7	16.7	21.6	23.1
Missing	0.1	0.2	0.2	0.1
Area of residence (%)				
Urban	82.0	79.3	82.5	82.7
Rural	18.0	20.1	17.5	17.3
Comorbidity (%)				
Hypertension	26.2	37.4	27.3	32.0
Diabetes	8.3	11.6	7.5	7.6
Chronic obstructive pulmonary disease	8.1	25.8	7.8	8.1
Asthma	2.6	3.6	3.1	3.1
<i>Neighborhood-level risk factors¹</i>				
Percentage of the population ≥ 15 years of age with less than a high school education	26.0	28.4	26.0	25.5
Percentage of the population ≥ 15 years of age without employment	6.1	6.6	6.1	6.0
Percentage of recent immigrants ²	3.4	3.1	3.4	3.3
Average household income with all ages (in \$1,000 CAN; standard deviation in parenthesis)	58.9 (26.5)	52.9 (24.3)	58.7 (26.5)	59.4 (27.0)

¹From Canadian Census 2001, at the census dissemination area level.

²Immigrants arrived in the 5 years prior to census.

Table 2. Hazard ratios (HRs) and 95% confidence intervals (CIs) for the associations of incidence of lung cancer with every interquartile-range (IQR) increase in exposure to fine particles (PM_{2.5}), nitrogen dioxide (NO₂), ground-level ozone (O₃) and total oxidants (O_x)

Model ¹	PM _{2.5}		NO ₂		O ₃		O _x	
	HR	95% CI	HR	95% CI	HR	95% CI	HR	95% CI
<i>Main analysis</i>								
Adjusted for age and sex, and stratified by region ²	0.99	0.98–1.00	0.99	0.97–1.00	0.96	0.95–0.97	0.98	0.98–0.99
Further adjusted for neighborhood-level covariates ³	1.02	1.01–1.04	1.05	1.03–1.07	0.99	0.98–1.00	1.00	0.99–1.01
Further adjusted for urban residency and a north/south indicator	1.02	1.01–1.05	1.05	1.03–1.07	0.97	0.96–0.98	0.99	0.98–1.00
<i>Sensitivity analysis</i>								
Using a 10-year lag in exposure	1.02	1.00–1.03	1.04	1.02–1.06	0.98	0.97–0.99	1.00	0.99–1.01
Further adjusted for selected comorbidities ⁴	1.03	1.01–1.04	1.04	1.02–1.07	0.98	0.97–1.00	1.00	0.99–1.01
Further adjusted for neighborhood deprivation ⁵	1.01	0.99–1.02	1.03	1.01–1.05	0.97	0.96–0.98	0.99	0.98–1.00
Further adjusted for health care access	1.02	1.01–1.04	1.05	1.02–1.07	0.97	0.95–0.98	0.99	0.98–1.00
Considered spatial random-effects Cox proportional hazard models ⁶	1.02	1.00–1.04	1.04	1.01–1.06	0.98	0.96–0.99	0.99	0.98–1.00
Further indirectly adjusted for potential individual-level risk factors ⁷	1.03	1.01–1.05	1.05	1.03–1.08	0.97	0.96–0.99	0.99	0.99–1.00

Interquartile ranges for PM_{2.5}, NO₂, O₃ and O_x were 5.3 µg/m³, 13.9 ppb, 8.2 ppb, and 3.3 ppb, respectively.

¹Standard Cox proportional hazards models in which exposure to each pollutant was fitted using a 3-year moving average with a 4-year time lag.

²All models stratified by region (living in Toronto or not).

³Adjusted for census tract-level recent immigrants (arrived in the 5 years prior to census), unemployment rate, education and annual household income.

⁴Selected comorbidities included hypertension, diabetes, chronic obstructive pulmonary disease and asthma.

⁵Neighborhood deprivation was defined based on the Ontario Marginalization Index.

⁶Random effects in our model were represented by one spatial cluster level defined by census divisions (equivalent to counties).

⁷Indirectly adjusted for smoking, alcohol drinking, obesity and physical activity.

exposure and the adjustment variables) are presented in Supporting Information Table S5.

In contrast, there was little evidence of an association between these air pollutants and breast cancer incidence (Table 3). In the fully adjusted analyses, the estimated HRs for incident breast cancer corresponding to each IQR increase in exposure were 1.01 (95% CI: 0.99–1.02) for PM_{2.5}, 1.02 (95% CI: 0.99–1.04) for NO₂, 0.99 (95% CI: 0.98–1.01) for O₃, and 1.00 (95% CI: 0.98–1.01) for O_x, respectively. These results remained unaltered in most of the sensitivity analyses, with the exception of using a 10-year lag in exposure, for which the HRs were found to be slightly strengthened (PM_{2.5}: HR = 1.02; 95% CI: 1.00–1.03 and NO₂: HR = 1.03; 95% CI: 1.01–1.05). In addition, further adjusting for three additional covariates for breast cancer (i.e., age at first full-term pregnancy, number of full-term and history of hormonal replacement therapy) had little impacts on the estimated risks (Supporting Information Tables S6 and S7).

We observed some evidence of effect modification by selected characteristics (Supporting Information Table S8). For example, there was a tendency for stronger associations of incident lung cancer with PM_{2.5}, NO₂ and O_x among younger adults. Participants living in lower income areas also exhibited a higher incidence of lung cancer in association with PM_{2.5} and NO₂. Furthermore, women living with diabetes tended to have a higher risk of breast cancer in relation to PM_{2.5} than did nondiabetic women. We observed no apparent differences for pre/postmenopausal breast

cancer risks (using 51 years of age as a cutoff) in relation to air pollution (Supporting Information Table S9).

Finally, in our analyses of the concentration–response relationships, we observed sublinear associations between incident lung cancer and PM_{2.5} and NO₂ with some evidence of thresholds at 10 µg/m³ and 15 ppb, respectively (Fig. 1). We further created the ensemble HRs for the associations between incident lung cancer and PM_{2.5} and NO₂ from all concentration–response models at different percentiles of exposure (i.e., 1st, 25th, 50th, 75th and 99th) and calculated the changes in the ensemble HRs by different levels of exposure (Supporting Information Table S10). For example, for the relationship between lung cancer and PM_{2.5}, we found that the risk of lung cancer increased by 0.1, 0.3, 0.6 and 7.4% when compared the HRs at the 25th with 1st percentile, 50th with 25th percentile, 75th with 50th percentile and 99th with 75th percentile of PM_{2.5}, respectively.

Discussion

In this large cohort study, we observed that lung cancer incidence was consistently associated with long-term exposures to PM_{2.5} and NO₂ even at the relatively low concentrations seen in Ontario, but it was not associated with O₃ and O_x. In contrast, we found limited evidence linking any of these air pollutants to incident breast cancer. Our subgroup analyses showed some

Table 3. Hazard ratios (HRs) and 95% confidence intervals (CIs) for the associations of incidence of breast cancer with every interquartile-range (IQR) increase in exposure to fine particles (PM_{2.5}), nitrogen dioxide (NO₂), ground-level ozone (O₃) and total oxidants (O_x)

Model ^a	PM _{2.5}		NO ₂		O ₃		O _x	
	HR	95% CI	HR	95% CI	HR	95% CI	HR	95% CI
Main analysis								
Adjusted for age and sex only, and stratified region ²	1.00	0.99–1.02	0.99	0.97–1.01	1.01	1.00–1.02	1.00	1.00–1.01
Further adjusted for neighborhood-level covariates ³	1.01	1.00–1.03	1.02	1.00–1.04	1.01	0.99–1.02	1.01	1.00–1.01
Further adjusted for urban residency and a north/south indicator	1.01	0.99–1.02	1.02	0.99–1.04	0.99	0.98–1.01	1.00	0.99–1.01
Sensitivity analysis								
Using a 10-year lag in exposure	1.02	1.00–1.03	1.03	1.01–1.05	1.00	0.99–1.02	1.01	1.00–1.02
Further adjusted for selected comorbidities ⁴	1.01	0.99–1.02	1.02	0.99–1.04	0.99	0.98–1.01	1.00	0.99–1.01
Further adjusted for neighborhood deprivation ⁵	1.01	0.99–1.02	1.02	1.00–1.04	0.99	0.98–1.01	1.00	0.99–1.01
Further adjusted for health care access	1.01	0.99–1.02	1.02	0.99–1.04	0.99	0.98–1.01	1.00	0.99–1.01
Considered spatial random-effects Cox proportional hazards models ⁶	1.01	0.99–1.02	1.02	0.99–1.04	0.99	0.98–1.01	1.00	0.99–1.01
Further indirectly adjusted for potential behavioral risk factors ⁷	1.00	0.98–1.02	1.01	0.99–1.03	0.99	0.98–1.01	1.00	0.99–1.01

Interquartile ranges for PM_{2.5}, NO₂, O₃, and O_x were 5.3 µg/m³, 13.9 ppb, 8.2 ppb, and 3.3 ppb, respectively.

¹Standard Cox proportional hazards models in which exposure to each pollutant was fitted using a 3-year moving average with a 4-year time lag.

²All models stratified by region (living in Toronto or not).

³Adjusted for census tract-level recent immigrants (arrived in the 5 years prior to census), unemployment rate, education, and annual household income.

⁴Selected comorbidities included hypertension, diabetes, chronic obstructive pulmonary disease and asthma.

⁵Neighborhood deprivation was defined based on the Ontario Marginalization Index.

⁶Random effects in our model were represented by one spatial cluster level defined by census divisions (equivalent to counties).

⁷Indirectly adjusted for smoking, alcohol drinking, obesity and physical activity.

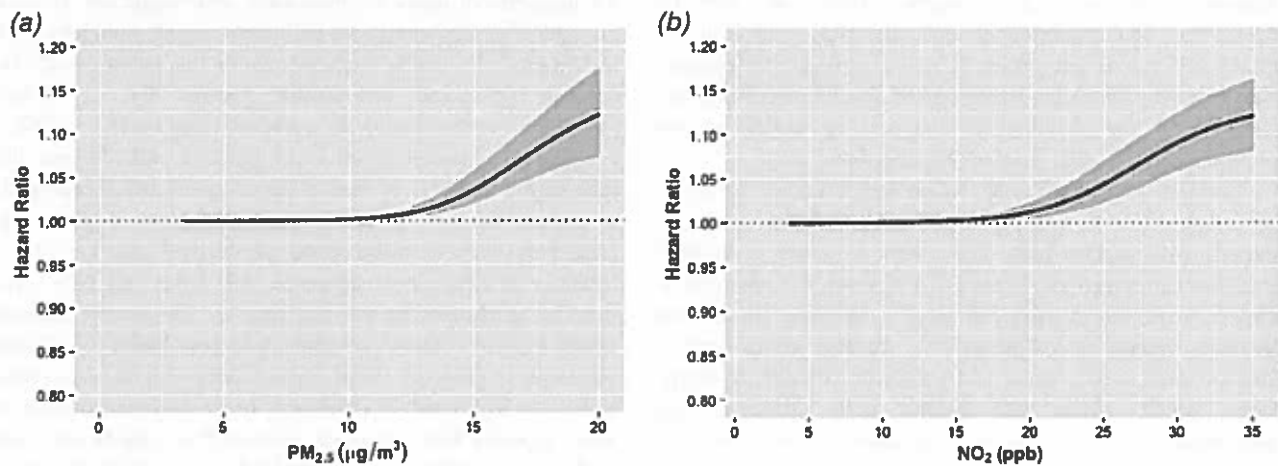


Figure 1. Concentration–response curves for the associations of incidence of lung cancer with exposure to (a) fine particles (PM_{2.5}) and (b) nitrogen dioxide (NO₂). The gray shaded area represents the 95% confidence interval.

evidence of effect modification by age, income level and comorbid diabetes for the associations with PM_{2.5} and NO₂. In addition, we observed that the shape of the concentration-response relationships was sublinear for the associations of incident lung cancer with PM_{2.5} and NO₂. To the best of our knowledge, this is the largest cohort study of long-term exposure to ambient air pollution and the incidence of two major cancer types to date.

In line with existing epidemiological evidence,³ our study observed a positive association between chronic exposure to PM_{2.5} and the development of lung cancer after adjusting for a series of individual and area-level risk factors. Each ~5 µg/m³ increase in outdoor PM_{2.5} concentration was associated with a 2% (95% CI: 1%–5%) increased risk of lung cancer. The magnitude of our estimate was lower than most previous studies

conducted in North America and Europe that typically contained a small number of cases (with lung cancer cases ranging from 250 to 2,309),^{7-10,41-43} which showed the increases in incident lung cancer per 10 $\mu\text{g}/\text{m}^3$ increase in $\text{PM}_{2.5}$ exposure varying from 6% to 43%, but was higher than that from a study in Netherlands (HR: 0.81; 1,940 cases).⁸ These differences might be due to inherent difference in the characteristics of study subjects (e.g., females,^{41,42} males,⁴³ nonsmokers¹⁰ and general populations⁷⁻⁹), different study designs (i.e., case-control⁷ and cohort design^{8-10,40-43}), possible differences in the assessment of outcomes and $\text{PM}_{2.5}$ (e.g., land use regression models⁹ and spatiotemporal interpolation methods^{7,10,42}), and differences in the sources and compositions of $\text{PM}_{2.5}$, or chance.

Interestingly, we found a somewhat strong association between lung cancer and NO_2 exposure (HR = 1.05; 95% CI: 1.03–1.07 for every 14 ppb increase in NO_2). A handful of previous studies using case-control or cohort designs have also assessed the lung cancer risk in relation to long-term exposure to NO_2 , but most of them focused on mortality.² Among the few studies investigating the association of NO_2 with lung cancer incidence, the results were inconsistent.^{5-9,44} For example, in a case-control study of 445 cases and 948 controls in Toronto, Canada, a strong positive association between NO_2 and incident lung cancer was observed (OR: 1.59; 95% CI: 1.19–2.12 per 4.8 ppb),⁶ whereas in the European Study of Cohorts of Air pollution Effects (11 European cohorts from 5 countries comprising a total of 2,095 cases), Raaschou-Nielsen *et al.* found no association (HR: 0.99; 95% CI: 0.93–1.06).⁹ It is important to note that NO_2 itself is not an established carcinogen: rather, NO_2 is a surrogate for combustion emissions including traffic-related air pollution which is a complex mixture of diverse carcinogens (e.g., volatile organic compounds, polycyclic aromatic hydrocarbons, etc.).

Compared to lung cancer, much less is known about the association between air pollution and breast cancer. Several experimental studies have shown that exposure to airborne particles can trigger oxidative DNA damage in human breast cancer cells, which may, in part, contribute to airborne particle-induced carcinogenesis.^{12,13} Another study found a link between breast cancer and polycyclic aromatic hydrocarbons which, along with having both estrogenic and antiestrogenic effects, can cause oxidative stress.⁴⁵ However, epidemiologic evidence on the relationship between air pollution and breast cancer incidence is sparse and inconsistent. Although three case-control studies observed positive associations with exposure to $\text{PM}_{2.5}$ or NO_2 ,¹⁵⁻¹⁷ our results are similar to several other recent cohort studies which found limited evidence linking incident breast cancer to $\text{PM}_{2.5}$ or NO_2 .¹⁸⁻²¹ For example, no association with $\text{PM}_{2.5}$ was observed in the Danish Nurse Cohort Study (HR = 0.99; 95% CI: 0.94–1.10 per IQR of 3.3 $\mu\text{g}/\text{m}^3$; 1,145 cases)¹⁸ and in the US Sister Study (HR = 1.03; 95% CI: 0.96–1.11 per IQR of 3.6 $\mu\text{g}/\text{m}^3$; 1,749 cases).²⁰ In addition, the European Study of Cohorts of

Air pollution Effects reported no association between incident breast cancer and exposure to NO_2 with a HR of 1.02 (95% CI: 0.98–1.07 per 10 $\mu\text{g}/\text{m}^3$; 3,612 cases).²¹ The lack of association observed in our study and in these previous cohort studies might be attributable to the absence of data on early-life air pollution exposures. Indeed, a previous case-control study reported a positive association between exposure to total suspended particles at birth and postmenopausal breast cancer, but not with exposures occurred later in life.⁴⁶ This previous finding supports our observations in a sensitivity analysis involving a 10-year lag in exposure where we observed stronger HRs of breast cancer for both $\text{PM}_{2.5}$ (HR = 1.02; 95% CI: 1.00–1.03) and NO_2 (HR = 1.03; 95% CI: 1.01–1.05). Further studies of air pollution and breast cancer, especially using earlier exposure data, are needed to confirm these results.

To date, few epidemiological studies have assessed the association of chronic exposure to O_3 with incidence of lung cancer and breast cancer. In our study, there was no evidence for increased risk of these two cancers in association with exposure to O_3 . This is similar to findings from several previous cohort studies of long-term exposure to O_3 and other chronic diseases (e.g., cardiovascular diseases and COPD).^{47,48}

Our subgroup analyses provided some evidence of effect modification by selected individual characteristics. First, age appeared to modify the association between incident lung cancer and exposure to $\text{PM}_{2.5}$, NO_2 and O_3 , with stronger impacts among young individuals compared to the elderly. We found a similar pattern in our previous work, with increasing risks for the incidence of major cardiovascular and respiratory diseases in relation to exposure to air pollutants among younger adults in Ontario.^{49,50} Possible explanations for this pattern could be different age-related time-activity patterns (i.e., a certain population's activity lasting for a relatively long time), and different genetic signatures which could correlate with different life span lengths and ages of onset of major age-related diseases such as cancer.⁵¹ Second, compared to subjects living in high-income areas, those living in socioeconomically deprived areas had higher incidence of lung cancer associated with $\text{PM}_{2.5}$ and NO_2 . This may be attributable to the fact that the low-income subjects tended to have increased susceptibility to poor health (e.g., higher prevalence of smoking). Third, women living with diabetes tended to be at a higher risk of developing breast cancer in relation to $\text{PM}_{2.5}$ exposure than nondiabetic women. This could be attributed to the fact that elevation in insulin levels could contribute to proliferation of breast tissue and promote the development of breast cancer.⁵² There is consistent epidemiological evidence regarding the excess risk of breast cancer associated with diabetes.⁵³

Importantly, few large cohort studies of ambient air pollution have characterized the shape of the concentration-response relationship, primarily due to restrictions in computer memory size and prolonged analysis time. Consequently, previous studies with large sample sizes often fit natural, restricted or smoothing splines (functions which can be estimated with standard computer software) with few degrees of freedom and few categories

of air pollution concentrations to describe the concentration-response associations.³⁸ However, these previous approaches may not have produced shapes that are suitable for health impact assessments, such as being monotonically nondecreasing.³⁸ In our study, we applied a newly developed class of concentration-response models (i.e., Shape Constrained Health Impact Function) which enables us to characterize the shape of the concentration-response associations in two large cohorts. We observed sublinear relationships of PM_{2.5} and NO₂ with lung cancer (i.e., a shallow slope at low concentrations and steeper slope at higher concentrations). It is noteworthy that the Canadian Census Health and Environment Cohort study also reported a sublinear relationship between PM_{2.5} and lung cancer mortality.⁵⁴ More importantly, we detected some evidence of thresholds for the associations of lung cancer with PM_{2.5} (~10 µg/m³) and NO₂ (~15 ppb), which has important implications for reducing the enormous burden of these two cancers globally.

Our study benefits from the large cohort size, which reduced the statistical uncertainty in risk estimates and allowed for improved precision in the estimations of risks among subgroups by selected characteristics. This cohort also allowed us to identify incident lung cancer and breast cancers using province-wide cancer registries, which greatly reduced the possibility of outcome misclassification. Furthermore, although we adjusted the models for a number of individual-level and time-varying neighborhood-level covariates, we found little evidence of confounding in the estimated air pollution-cancer associations. Our study was also strengthened by the use of satellite-based PM_{2.5} exposure estimates at finer spatial scales (1 km × 1 km) and highly spatially resolved NO₂ estimates from the validated LUR models. Finally, we were able to capture each subject's annual residential mobility, which allowed us to assign exposures to the representative point corresponding to the residential postal code of each subject for each year of follow-up within the study area. This approach allowed us to reduce exposure misclassification bias which could arise when subjects moved during the study period.

Several limitations of our study should be considered. First, our estimates of exposure developed based on certain periods of time may not accurately reflect long-term changes in air pollution despite the use of back-extrapolation to incorporate long-term temporal trends in pollution concentrations. As discussed above, we were also unable to derive exposure for the cohort members from the more distant past (e.g., childhood exposure) which may be associated with the development of

cancer later in adulthood. Second, our exposure estimates were at the postal-code level, which may not fully reflect each subject's complete personal exposure to air pollution, as it may be influenced by indoor exposures, occupations and lifestyles. Given the inherent imprecision of these spatially derived exposures, however, our estimated HRs are likely to be subject to nondifferential misclassification bias. Third, the Ontario Cancer Registry does not contain patients' detailed clinical characteristics which may confound the air pollution and cancer associations, such as cancer stage, severity and histological type. However, given that we evaluated outcomes in the entire population, confounding related to these factors is less likely. Fourth, we were unable to include information on several risk factors for breast cancer, such as family history, age at menarche, menopausal status and age at oophorectomy. However, a recent case-control study showed that including these covariates had little impact on the estimated risks for breast cancer in relation to air pollution.¹⁷ Our sensitivity analyses also showed that further adjustment for three additional covariates for breast cancer (i.e., age at first full-term pregnancy, number of full-term and history of hormonal replacement therapy) had little impact on the estimated risks. Finally, we lacked individual-level data on behavioral risk factors, such as smoking and obesity. To address this limitation, we applied an indirect adjustment method and found that indirectly adjusting for these variables had little impact on our estimated HRs. Furthermore, our results were insensitive to the additional adjustment of several comorbidities (e.g., COPD and hypertension) that are known to be related to lifestyle behaviors.

In conclusion, our study showed that long-term exposures to PM_{2.5} and NO₂ were associated with an increased incidence of lung cancer, but not breast cancer. We also found limited evidence linking O₃ and O_x to either lung or breast cancer.

Acknowledgements

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References

1. WHO. *Cancer Update 2018*. Geneva: WHO, 2018. Available at: <http://www.who.int/cancer/en/>.
2. Hamra GB, Laden F, Cohen AJ, et al. Lung cancer and exposure to nitrogen dioxide and traffic: a systematic review and meta-analysis. *Environ Health Perspect* 2015;123:1107-12.
3. Hamra GB, Guha N, Cohen A, et al. Outdoor particulate matter exposure and lung cancer: a systematic review and meta-analysis. *Environ Health Perspect* 2014;122:906-11.
4. Loomis D, Grosse Y, Lauby-Secretan B, et al. The carcinogenicity of outdoor air pollution. *Lancet Oncol* 2013;14:1262-3.
5. Hart JE, Spiegelman D, Beelen R, et al. Long-term ambient residential traffic-related exposures and measurement error-adjusted risk of incident lung cancer in The Netherlands cohort study on diet and cancer. *Environ Health Perspect* 2015;123:860-6.
6. Villeneuve PJ, Jerrett M, Brenner D, et al. A case-control study of long-term exposure to ambient volatile organic compounds and lung cancer in Toronto, Ontario, Canada. *Am J Epidemiol* 2014;179:443-51.

- Cancer Epidemiology
7. Hystad P, Demers PA, Johnson KC, et al. Long-term residential exposure to air pollution and lung cancer risk. *Epidemiology* 2013;24:762–72.
 8. Beelen R, Hoek G, van den Brandt PA, et al. Long-term exposure to traffic-related air pollution and lung cancer risk. *Epidemiology* 2008;19:702–10.
 9. Raaschou-Nielsen O, Andersen ZJ, Beelen R, et al. Air pollution and lung cancer incidence in 17 European cohorts: prospective analyses from the European study of cohorts for air pollution effects (ESCAPE). *Lancet Oncol* 2013;14:813–22.
 10. Gharibvand L, Shavlik D, Ghamsary M, et al. The association between ambient fine particulate air pollution and lung cancer incidence: results from the AHSMOG-2 study. *Environ Health Perspect* 2017;125:378–84.
 11. Vineis P, Hoek G, Krzyzanowski M, et al. Air pollution and risk of lung cancer in a prospective study in Europe. *Int J Cancer* 2006;119:169–74.
 12. Chen ST, Lin CC, Liu YS, et al. Airborne particulate collected from Central Taiwan induces DNA strand breaks, poly(ADP-ribose) polymerase-1 activation, and estrogen-disrupting activity in human breast carcinoma cell lines. *J Environ Sci Health A Tox Hazard Subst Environ Eng* 2013;48:173–81.
 13. Mordukhovich I, Rössner P Jr, Terry MB, et al. Associations between polycyclic aromatic hydrocarbon-related exposures and p53 mutations in breast tumors. *Environ Health Perspect* 2010;118:511–8.
 14. Villeneuve P, Goldberg M, Crouse D, et al. Residential exposure to fine particulate matter air pollution and incident breast cancer in a cohort of Canadian women. *Environ Epidemiol* 2018;2:e021.
 15. Crouse DL, Goldberg MS, Ross NA, et al. Postmenopausal breast cancer is associated with exposure to traffic-related air pollution in Montreal, Canada: a case-control study. *Environ Health Perspect* 2010;118:1578–83.
 16. Hystad P, Villeneuve PJ, Goldberg MS, et al. Exposure to traffic-related air pollution and the risk of developing breast cancer among women in eight Canadian provinces: a case control study. *Environ Int* 2015;74:240–8.
 17. Goldberg MS, Labrèche F, Weichenthal S, et al. The association between the incidence of postmenopausal breast cancer and concentrations at street-level of nitrogen dioxide and ultrafine particles. *Environ Res* 2017;158:7–15.
 18. Andersen ZJ, Ravnskjaer L, Andersen KK, et al. Long-term exposure to fine particulate matter and breast cancer incidence in the Danish nurse cohort study. *Cancer Epidemiol Biomarkers Prev* 2017;26:428–30.
 19. Hart JE, Bertrand KA, DuPre N, et al. Long-term particulate matter exposures during adulthood and risk of breast cancer incidence in the Nurses' health study II prospective cohort. *Cancer Epidemiol Biomarkers Prev* 2016;25:1274–6.
 20. Reding KW, Young MT, Szpiro AA, et al. Breast cancer risk in relation to ambient air pollution exposure at residences in the sister study cohort. *Cancer Epidemiol Biomarkers Prev* 2015;24:1907–9.
 21. Andersen ZJ, Stafoggia M, Weinmayr G, et al. Long-term exposure to ambient air pollution and incidence of postmenopausal breast cancer in 15 European cohorts within the ESCAPE project. *Environ Health Perspect* 2017;125:107005.
 22. Chen H, Kwong JC, Copes R, et al. Cohort profile: the Ontario population health and environment cohort (ONPHEC). *Int J Epidemiol* 2017;46:405–405j.
 23. Matheson FI, Dunn JR, Smith KL, et al. Development of the Canadian marginalization index: a new tool for the study of inequality. *Can J Public Health* 2012;103:S12–6.
 24. Chan BTB, Schultz SE. *Supply and Utilization of General Practitioner and Family Physician Services in Ontario. ICES Investigative Report*. Toronto: Institute for Clinical Evaluative Sciences, 2005.
 25. van Donkelaar A, Martin RV, Brauer M, et al. Use of satellite observations for long-term exposure assessment of global concentrations of fine particulate matter. *Environ Health Perspect* 2015;123:135–43.
 26. van Donkelaar A, Martin RV, Spurr RJD, et al. High-resolution satellite-derived PM2.5 from optimal estimation and geographically weighted regression over North America. *Environ Sci Technol* 2015;49:10482–91.
 27. Crouse DL, Peters PA, Hystad P, et al. Ambient PM2.5, O3, and NO2 exposures and associations with mortality over 16 years of follow-up in the Canadian census health and environment cohort (CanCHEC). *Environ Health Perspect* 2015;123:1180–6.
 28. Chen H, Kwong JC, Copes R, et al. Exposure to ambient air pollution and the incidence of dementia: a population-based cohort study. *Environ Int* 2017;108:271–7.
 29. Hystad P, Setton E, Cervantes A, et al. Creating national air pollution models for population exposure assessment in Canada. *Environ Health Perspect* 2011;119:1123–9.
 30. Robichaud A, Ménard R. Multi-year objective analyses of warm season ground-level ozone and PM2.5 over North America using real-time observations and Canadian operational air quality models. *Atmos Chem Phys* 2014;14:1769–800.
 31. Pudykiewicz JA, Kallaur A, Smolarkiewicz PK. Semi-Lagrangian modelling of tropospheric ozone. *Tellus B* 1997;49:231–48.
 32. Stockwell WR, Yang JH, Shin HW, et al. Spatio-temporal variations of air pollutants (O3, NO2, SO2, CO, PM10, and VOCs) with land-use types. *Atmos Chem Phys* 2015;15:10857–85.
 33. Weichenthal S, Pinault LL, Burnett RT. Impact of oxidant gases on the relationship between outdoor fine particulate air pollution and nonaccidental, cardiovascular, and respiratory mortality. *Sci Rep* 2017;7:16401.
 34. Chen H, Goldberg MS, Burnett RT, et al. Long-term exposure to traffic-related air pollution and cardiovascular mortality. *Epidemiology* 2013;24:35–43.
 35. Pinault L, Tjepkema M, Crouse DL, et al. Risk estimates of mortality attributed to low concentrations of ambient fine particulate matter in the Canadian community health survey cohort. *Environ Health* 2016;15:18.
 36. Shin HH, Cakmak S, Brion O, et al. Indirect adjustment for multiple missing variables applicable to environmental epidemiology. *Environ Res* 2014;134:482–7.
 37. Kelsey JL, Gaimon MD, John EM. Reproductive factors and breast cancer. *Epidemiol Rev* 1993;15:36–47.
 38. Nasari MM, Szyszkowicz M, Chen H, et al. A class of non-linear exposure-response models suitable for health impact assessment applicable to large cohort studies of ambient air pollution. *Air Qual Atmos Health* 2016;9:961–72.
 39. Burnett R, Chen H, Szyszkowicz M, et al. Global estimates of mortality associated with long-term exposure to outdoor fine particulate matter. *Proc Natl Acad Sci USA* 2018;115:9592–7.
 40. Crouse DL, Pinault L, Bahram A, et al. Urban greenness and mortality in Canada's largest cities: a national cohort study. *Lancet Planet Health* 2017;1:e289–97.
 41. Tomczak A, Müller AB, Weichenthal SA, et al. Long-term exposure to fine particulate matter air pollution and the risk of lung cancer among participants of the Canadian National Breast Screening Study. *Int J Cancer* 2016;139:1958–66.
 42. Puett RC, Hart JE, Yanosky JD, et al. Particulate matter air pollution exposure, distance to road, and incident lung cancer in the nurses' health study cohort. *Environ Health Perspect* 2014;122:926–32.
 43. Nafstad P, Håheim LL, Oftedal B, et al. Lung cancer and air pollution: a 27 year follow up of 16 209 Norwegian men. *Thorax* 2003;58:1071–6.
 44. Nyberg F, Gustavsson P, Järup L, et al. Urban air pollution and lung cancer in Stockholm. *Epidemiology* 2000;11:487–95.
 45. Rodgers KM, Udesky JO, Rudel RA, et al. Environmental chemicals and breast cancer: an updated review of epidemiological literature informed by biological mechanisms. *Environ Res* 2018;160:152–82.
 46. Bonner MR, Han D, Nie J, et al. Breast cancer risk and exposure in early life to polycyclic aromatic hydrocarbons using total suspended particulates as a proxy measure. *Cancer Epidemiol Biomarkers Prev* 2005;14:53–60.
 47. Atkinson RW, Carey IM, Kent AJ, et al. Long-term exposure to outdoor air pollution and incidence of cardiovascular diseases. *Epidemiology* 2013;24:44–53.
 48. Atkinson RW, Carey IM, Kent AJ, et al. Long-term exposure to outdoor air pollution and the incidence of chronic obstructive pulmonary disease in a national English cohort. *Occup Environ Med* 2015;72:42–8.
 49. Bai L, Weichenthal S, Kwong JC, et al. Associations of long-term exposure to ultrafine particles and nitrogen dioxide with increased incidence of congestive heart failure and acute myocardial infarction. *Am J Epidemiol* 2019;188:151–9.
 50. Weichenthal S, Bai L, Hatzopoulou M, et al. Long-term exposure to ambient ultrafine particles and respiratory disease incidence in Toronto, Canada: a cohort study. *Environ Health* 2017;16:64.
 51. Sebastiani P, Solovieff N, Dewan AT, et al. Genetic signatures of exceptional longevity in humans. *PLoS One* 2012;7:e29848.
 52. Wolf I, Sadetzki S, Catane R, et al. Diabetes mellitus and breast cancer. *Lancet Oncol* 2005;6:103–11.
 53. Peairs KS, Barone BB, Snyder CF, et al. Diabetes mellitus and breast cancer outcomes: a systematic review and meta-analysis. *J Clin Oncol* 2011;29:40–6.
 54. Pinault LL, Weichenthal S, Crouse DL, et al. Associations between fine particulate matter and mortality in the 2001 Canadian census health and environment cohort. *Environ Res* 2017;159:406–15.

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Stacey Pfaltzgraff

From: Mark-Angie <Mark-Angie@comcast.net>
Sent: Saturday, June 13, 2020 10:10 PM
To: Stacey Pfaltzgraff
Cc: Mark Mayo
Subject: Public Comment- Ordinance #2017-302

CAUTION: External Email

Hello,

I am writing to express my strong opposition to the proposed Ordinance #2017-302. I implore you to protect the welfare of Ranson citizens and those living in surrounding Jefferson County by voting AGAINST this ordinance. Heavy industry at the Jefferson Orchards site is NOT wanted. The allocation of an industrial zone can lead to detrimental effects to our local agriculture, tourism, nearby schools, as well as deteriorate air, land and water quality. Your neighbors, children and the environment are counting on you to protect them. Please carefully consider the serious long term consequences of your actions- we can and must do better than this.

Thank you,
Angela Blair
126 Valmont Lane
Harpers Ferry, WV. 25425

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Rob Blanck <rmblanck@gmail.com>
Sent: Saturday, May 16, 2020 1:21 PM
To: Stacey Pfaltzgraff
Subject: June 23 Public Hearing

CAUTION: External Email

Sir/Ma'am,

I am writing to formally object to Mayor Duke's attempt to rezone the Orchards property into industrial use.

In my opinion this is an irreversible path that will damage human life for generations. I believe in free enterprise and minimal government but NEVER AT THE EXPENSE OF HUMAN LIVES AND SAFETY. Rockwool is taking advantage of low state environmental thresholds. They are a foreign corporation who has no business adding pollution to our country. We help generate profits that go to Denmark. That's not good for anybody.

The argued economic impact is outweighed by a number of factors: Air quality will worsen. Property values will decline. Aesthetics deteriorate. Children's health is risked. Subsidies are granted. Water quality will worsen. All of these things are definites. The economic benefit is questionable. So, the question should be...AT WHAT COST ?

Robert Blanck
 529 Multnomah Ln
 Harpers Ferry, WV 25425

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Bobbi Blok <bobbihelene@aol.com>
Sent: Wednesday, June 17, 2020 11:16 PM
To: Stacey Pfaltzgraff
Subject: Written Coments - Testimony 2017-302
Attachments: Ranson Test2017-302date-6-17-20.pdf; Ranson Test2017-302date-6-17-20.docx

CAUTION: External Email

TO: Ranson City Council

spfaltzgraff@ransonwv.us.

FROM: Bobbi Blok, 341 Wren Lane, Harpers Ferry, WV 25425
bobbihelene@aol.com

DATE: 6/17, 2020 written comments; 6/23, 2020 presented at ZOOM HEARING

SUBJECT: ORDINANCE # 2017- 302 AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: "JEFFERSON ORCHARDS" REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1).

Pursuant to the Ranson Notice and the follow-up that you forwarded, I am sending you via e-mail testimony relating to the Ranson Hearing: Ordinance #2017- 302 The testimony is being forwarded in both a Word.doc and PDF. Forwarding another e-mail to ensure that you received the e-mail

Would greatly appreciate confirmation of receipt of the written comments.
Still intend to present oral testimony on Tuesday, June 23 on zoom.
Appreciate your assistance on this matter. Take care.

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

TO: Ranson City Council

spfaltzgraff@ransonwv.us.

FROM: Bobbi Blok, 341 Wren Lane, Harpers Ferry, WV 25425

bobbihelene@aol.com

DATE: 6/17, 2020 written comments; 6/23, 2020 presented at ZOOM HEARING

SUBJECT: ORDINANCE # 2017- 302 AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: "JEFFERSON ORCHARDS" REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1).

Thank you for providing the community an opportunity to testify. Expanded written comments have also been submitted to the Ranson Council as of June 17, 2020.

As an advocate for children for over four decades, this testimony is written from experience and spoken from the heart. I have had the opportunity to testify before the White House Summit on Early Childhood Education, the US Congress, the Council of the District of Columbia, and the Carnegie Foundation Years of Promise Symposium. However, the testimony I am sharing with you tonight in West Virginia is much more relevant and critical than any other testimony I've ever presented because I am, we all are breathing the same air, drinking the same water and walking the same land as the children of Jefferson County, especially the children attending North Jefferson Elementary School, a Title I facility designated for low income families located right across the road from the Rockwool construction site.

In the past several weeks the cry "I can't breathe" is echoing throughout our country and the world. It's also a silent cry from our children and the children yet unborn I am praying you are willing to hear and take the necessary action to protect them. The children deserve an environment that promotes clean air, water and a safe healthy area where they can play. Unfortunately, the plan as it is being proposed is a sacrifice zone; which is considered discriminatory because it targets low income communities of color.

There are people who will be presenting testimony that will clearly demonstrate that these zoning changes will exacerbate environmental hazards. Their expertise relating to these hazardous facts require your serious consideration as Judge Hammer expressed. We urge Ranson Council to correct its previous actions and acknowledge that the Court's ruling emphasized the distinct statutes regarding zoning ordinances as directed by the WV State Code and notes that compliance is not at the unilateral discretion of an individual municipality. We applaud the ruling for highlighting the fact that united we stand - divided we fall and the previous actions taken by Ranson jeopardize ALL.

The West Virginia State Board of Education has clearly outlined regulations that create a safe zone relating to the location of public schools (6200, Section 202, locations of school facilities(<https://apps.sos.wv.gov/adlaw/csr/readfile.aspx?DocId=51042&Format=PDF>.) Understanding the law does not require a city to follow these regulations yet the local BOE is mandated to follow them. However, I am publicly going on record on behalf of the children, especially those children with asthma, that the city of Ranson at minimum is MORALLY obligated to take WVBOE Policy 6200 sec. 202 under advisement and comply with the due diligence that ensures positive action to protect the health and welfare of our children. You have the opportunity to envision and enact a safe and

thriving zone rather than an environmental sacrifice zone. Ranson can go on record clearly stating the prohibition of toxic pollutants, the increase of gaseous fumes from large truck traffic and constant incessant noise that can prove detrimental situated near a public school.

Many environmental experts publicly shared their concerns. Dr. Jerome A. Paulson, MD, FAAP, who is a pediatric consultant to the Mid-Atlantic Center for Children's Health & the Environment, also known as MACCHE. MACCHE is the Pediatric Environmental Health Specialty Unit (PEHSU) that serves, West Virginia, Pennsylvania, Delaware, Maryland, Virginia and the District of Columbia. His detailed study is included in the written testimony. Anyone would be moved by his findings relating to the effect of environmental pollution on the development of children.

His study focused on Rockwool and was based on the fact that the factory is expected to use 84-90 tons of coal per day and release 152,935 tons carbon dioxide equivalent per year, 238.96 tons nitrogen oxide per year, 147.45 tons sulfur dioxide per year, 67.7 tons of formaldehyde per year, several hundred tons of atmospheric particulate matter per year, as well as various volatile organic compounds. *One of his colleagues at MACCHE has developed some maps of the local area which includes Maryland, Virginia as well as West Virginia. The maps indicated that there are several elementary, middle and high schools within 5 miles of the industrial site.* Dr. Paulson further concluded that *"the increase in the pollutants in the local atmosphere will present health threats not only to the children in the elementary school, but to the community as a whole. That said, it is important to recognize that given the physiologic, anatomic and behavioral differences between children and adults, children are often at greater risk of adverse health impacts of pollutants than are adults.... It is well documented that children growing up in areas with greater amounts of air pollution are likely to show decreased lung function as young adults relative to children growing up in areas of less air pollution. Particulate pollution can certainly exacerbate asthma in both children and adults. There is increasing evidence that air pollution is neurotoxic to children in utero and to young children. He agreed with the community that it is not prudent to build this plant so close to an elementary school.* It will have long lasting effects into adulthood. Unfortunately, according to the Center for Disease Control (CDC) West Virginia, as of 2018 has one of the highest percentages of prevalence of asthma cases listed in the nation.

Another major concern is that the zone is located on karst topography. A number of persons testifying will be going into detail regarding the adverse effect of building industrial facilities on such unstable terrain. Since Rockwool has begun construction there have been approximately seventeen sinkholes that have been sighted. Infact, there appears to be a sinkhole that is now present in the front of North Jefferson Elementary School. Since the school is located in Ranson it would be prudent for the jurisdiction to examine and resolve this problem before further deliberating on future zoning plans. Our children need to be out of harms way and breathe!

You can prove to be the heroes in this toxic battle and overcome the environmental injustice that threatens Ranson and Jefferson County as a whole for the sake of our future. Avoid Ranson becoming the next Cancer Alley and Love Canal
Please oppose Proposed Ordinance #2017-302:

THE CHILDREN ARE WATCHING.



Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

LETTER SHARED by Dr. Jerome Paulson

Dear Ms Christina Mabe-Stork

I am Jerome A. Paulson, MD, FAAP. I am the pediatric consultant to the Mid-Atlantic Center for Children's Health & the Environment, also known as MACCHE. MACCHE is the Pediatric Environmental Health Specialty Unit (PEHSU) that serves, West Virginia, Pennsylvania, Delaware, Maryland, Virginia and the District of Columbia. Your inquiry has been referred to us by Dr Susan Buchanan of the PEHSU serving the Great Lakes area, the Great Lakes Center for Children's Environmental Health.

I understand that you are concerned about the development of an industrial facility near the local elementary school that will use coal as the source of power. You have told us that the plant is expected to use 84-90 tons of coal per day and release 152,935 tons carbon dioxide equivalent per year, 238.96 tons nitrogen oxide per year, 147.45 tons sulfur dioxide per year, 67.7 tons of formaldehyde per year, several hundred tons of atmospheric particulate matter per year, as well as various volatile organic compounds. You also indicated that the plant will employ two, 213 foot tall smoke stacks.

While the information that you have provided is not sufficient to perform a full environmental impact assessment, I agree that there is reason for concern.

Some of the local impact will be decreased by the tall smokestacks. While not preventing the production of the pollutants they will disperse some of them far downwind from the local community and compromise the health of the populations downwind.

One of my colleagues at MACCHE has developed some maps of your local area. The first map indicates that there are several elementary, middle and high schools within 5 miles of the Rockwool factory site. In addition, there are many churches and child care centers within 5 miles of the factory. The second map adds in potential farm land. We do not have information about what that land is actually used for; but we would be concerned about contamination of the land itself or contamination of crops grown for human or animal consumption.

I certainly agree that the increase in the pollutants in the local atmosphere will present health threats not only to the children in the elementary school, but to the community as a whole. That said, it is important to recognize that given the physiologic, anatomic and behavioral differences between children and adults, children are often at greater risk of adverse health impacts of pollutants than are adults. Some of the concerns that I have are as follows. This is not ment a complete list of toxic chemicals that may be released by the factory.

Overall air pollution. It is well documented that children growing up in areas with greater amounts of air pollution are likely to show decreased lung function as young adults relative to children growing up in areas of less air pollution. There is increasing evidence that air pollution is neurotoxic to children in utero and to young children.

Particulate air pollution. Particulate pollution can certainly exacerbate asthma in both children and adults. In adults, exposure to particulate pollution is associated with increased risk of heart attack and stroke. There is increasing evidence that particulate air pollution is neurotoxic to children in utero and to young children.

Oxides of nitrogen and sulfur. Both oxides of nitrogen and oxides of sulfur form acids in the presence of moisture in the air. These acids can irritate the eyes and nose. More importantly, when inhaled, these acids irritate the lining of the bronchi and precipitate asthma attacks. There

is increasing evidence that oxides of nitrogen are neurotoxic to children in utero and to young children.

Mercury. The burning of coal releases mercury. Because mercury is relatively heavy, it precipitates out of the atmosphere relatively close to the source. If there are rivers and lakes near by, that mercury is converted to methyl mercury and is incorporated into the tissue of fish. If those fish are caught and eaten the mercury is toxic to the brain. This is particularly worrisome for the children in utero of women who are pregnant and young children.

Formaldehyde. Formaldehyde rapidly disperses and breaks down in the air. If there are high formaldehyde levels within the factory, the primary risk is to the workers. Formaldehyde can increase the risk of asthma, and, most importantly, is a known human carcinogen. Again, the risk of cancer would primarily be observed in workers exposed to high levels of formaldehyde.

Carbon dioxide. While the carbon dioxide may not present an immediate health risk to local children or adults, it certainly contributes to worsening of climate change on a global scale. We are seeing increased severe weather events as a result of climate change. Climate change is causing changes in infectious disease patterns. It has increased the length and severity of the allergy season, as well as increasing other health risks.

Ozone. The factory will release ozone and chemicals which promote the formation of ozone in the atmosphere. Ozone is hazardous to all people; and presents special risks to people with asthma or other lung diseases, older adults, people of all ages who exercise or work hard outside, and babies and children. Ozone irritates the mucous membranes of all people and can cause asthma attacks in those who are predisposed.

Phenol. Phenol is another chemical that can irritate the mucous membranes and the lungs. In animals, long term, repeated exposures to phenol in the air can cause more serious health problems including neurologic, cardiac pulmonary and liver damage.

I agree with you that it is not prudent to build this plant so close to an elementary school. You may use this letter as you see fit in your efforts to raise concerns. While there is not a West Virginia Chapter of Moms Clean Air Force (<https://www.momscleanairforce.org/>), the national organization may be helpful; and you may want to consider starting a West Virginia Chapter. Also, I would suggest contacting the West Virginia chapter of the American Lung Association (<https://www.lung.org/about-us/local-associations/west-virginia.html>). I know that the Sierra Club of West Virginia (<https://www.sierraclub.org/west-virginia>) has raised concerns about the Rockwool plant as has the West Virginia Chapter of the American Academy of Pediatrics (<https://www.wvaap.com/>).

Please let me know if there is any additional information that I can provide.

Sincerely,

Jerome A. Paulson, MD, FAAP
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The Mid-Atlantic Center for Children's Health & the Environment, a Pediatric Environmental Health Specialty Unit prepared this website on behalf of the American Academy of Pediatrics

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and

Professor Emeritus
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George Washington University School of Medicine and Health Sciences and George
Washington University Milken Institute School of Public Health

INFORMATION RELATING TO WV STATE BOE POLICY 6200 sec. 202.06 re: proximity of a school near a factory

Including full text of Policy 6200 may be accessed using this link:
<https://apps.sos.wv.gov/adlaw/csr/readfile.aspx?DocId=51042&Format=PDF>

202.06 For the safety of students, the school site shall be located away from hazards and undesirable environments, such as:

- A. Railroads, arterial highways, heavily traveled streets, traffic, and congestion
- B. Noise, toxic gas escapes from railroads, airports, and odoriferous plants or industries
- C. Natural barriers limiting accessibility and expandability, such as rivers, lakes, swamps, and protruding ridges
- D. High voltage transmission lines, booster or reduction stations, high pressure gas lines, and transformer stations
- E. Taverns, fire stations, bulk storage plants for flammable liquid, and property zoned as industrial
- F. Situations where a combination of factors such as those presented above could contribute to the possibility of human entrapment
- G. Building sites must be located above the 100-year flood plain as determined by the U.S. Corp of Engineers. The finish floor elevation of a new facility must be a minimum of two feet above the established 100-year flood plain. When considering property at or adjacent to a flood plain, the county must obtain a Certificate of Compliance from the County Flood Plain Manager to verify the Base Floor Elevation is above the 100-year flood plain and safe from potential hazards.
- H. Public service facilities which must be available for a school site include: water, gas, telephone, cable/internet, electricity, sewage disposal, fire protection, and transportation.

WV also looks for guidance, but we also lean heavily on our design professionals to ensure all applicable design codes and standards are met. In our

experience, we believe the authors of 6200 felt "away from" was sufficient enough language for a state education policy document, but any specific information related to the limits of proximity is the responsibility of the design Architect or Engineer (A/E) of record for the project. As their professional licensure and stamp requires their design to protect life, safety, and welfare of all users of their buildings, it is up to the A/E to make sure all codes, standards, and requirements from applicable local, state, and federal laws are met. Just as you expect and require your A/E to design a ramp to meet ADA guidelines, we would expect our A/Es to meet specific requirements related to proximity and adjacency to "hazards and undesirable environments."

Often this requirement requires research from the A/E. The Architects for the new Clendenin Elementary School in Kanawha County found, after much research and consultation, there was a specific requirement for new buildings (schools) to be a minimum of 660 feet away from the nearest gas transmission line. This was tricky because there are so many in that area, but the school design is slated to sit far enough away to meet this requirement. We expect that any plans for a school near a factory would receive similar due diligence by the A/E of record for the local board of education.

Information requested from WV Delegate John Doyle and additional detail and links provided courtesy of government staff

The full text of Policy 6200 may be accessed using this link:
<https://apps.sos.wv.gov/adlaw/csr/readfile.aspx?DocId=51042&Format=PDF>.

ARTICLE RACISM IS KILLING THE PLANET BY HOP HOPKINS | JUN 8 2020

Last week, my family and I attended an interfaith rally in Los Angeles in defense of Black life. We performed a group ritual in which we made noise for nine minutes to mark the last moments of George Floyd's life. My wife, my oldest daughter, and I played African drums to mark those nine minutes with the rhythm of a beating heart. *Da-dum, da-dum, da-dum*, over and over again.

While we drummed, I realized how difficult it is to keep up any physical activity for nine minutes straight. Most of us can't even sit completely still on our butts for nine minutes; if you've ever meditated, you understand why they refer to sitting as *practice*.

As I struggled to maintain my posture and keep up the rhythm, I thought about the level of commitment it takes to hold someone down for nine minutes straight. The realization horrified me. The cop who has been charged with murdering George Floyd had to have been deeply

committed to taking his life. The police officer had so many chances to let up the pressure, to let George live. Yet the officer made the choice not to.

To spend nine minutes taking the life-breath from another person: That is what white supremacy does to white people. That is what white supremacy does to the rest of us too. White supremacy robs each of us of our humanity. It causes white people to view Black people as less than human. Every one of those cops watching George die was convinced that the man pinned to the ground was less than human, was in some way disposable.

Otherwise, how could they hold him down for nine whole minutes? How could they bring themselves to do it?

You can't have climate change without sacrifice zones, and you can't have sacrifice zones without disposable people, and you can't have disposable people without racism.

During the street protests and marches of the past two weeks, many people carried signs that read "Racism Is Killing Us." It's no exaggeration to say that racism and white supremacy harm all of us, because in addition to robbing us of our humanity, racism is also killing the planet we all share.

An idea—a long-overdue realization—is growing in the environmental movement. It goes something like this: "We'll never stop climate change without ending white supremacy." This argument has entered the outdoor recreation and conservation space thanks to the leadership of Black, Indigenous, and other people of color in the climate justice movement. The idea has taken on new force as folks in the mainstream environmental movement do our best to show up for George Floyd, Breonna Taylor, Tony McDade, and all the Black people still living and subject to police violence.

I know that a lot of people are struggling with the thought that addressing the environmental crises must involve dismantling white supremacy. At Sierra Club meetings, some people hear me say something like that and think, "Damn, fighting climate change wasn't hard enough already? Now we have to end racism and white supremacy too? Seriously, man?"

I get that feeling of being overwhelmed. It's a lot to carry. It's a lot to hold. We all have enough to do without feeling like we're taking on even more.

But I want to share another lens from which we can view this moment. I really believe in my heart of hearts—after a lifetime of thinking and talking about these issues—that we will never survive the climate crisis without ending white supremacy.

Here’s why: You can’t have climate change without sacrifice zones, and you can’t have sacrifice zones without disposable people, and you can’t have disposable people without racism.

We’re in this global environmental mess because we have declared parts of our planet to be disposable. The watersheds where we frack the earth to extract gas are considered disposable. The neighborhoods near where I live in Los Angeles, surrounded by urban oilfields, are considered disposable. The very atmosphere is considered disposable. When we pollute the hell out of a place, that’s a way of saying that the place—and the people and all the other life that calls that place home—are of no value.

In order to treat places and resources as disposable, the people who live there have to get treated like rubbish too. Sacrifice zones imply sacrificed people. Just think of Cancer Alley in Louisiana. Most of the towns there are majority Black, and nowadays they call it Death Alley, because so many Black folks have died from the poison that drives our extractive economy. Or think of the situation in the Navajo Nation, where uranium mines poisoned the wells and the groundwater and coal plants for decades poisoned the air. Or consider the South Side of Chicago, where I used to live, which for years was a dumping ground of petroleum coke (a fossil fuel byproduct) and where residents are still struggling against pollution-related diseases. I’ve lived in a lot of places, and just about every place I’ve ever lived has been targeted by big polluters as a dumping ground.

Devaluing Black and Indigenous people’s lives to build wealth for white communities isn’t new. White settlers began that project in the 15th century, when they arrived in North America. Most Native peoples of North America lived in regenerative relationships with the land; they were careful to take no more than the land could sustain. The settlers had another ethic: They sought to dominate and control. They cleared the old-growth forests and plowed the prairies to make room for their wheat and their beef. They nearly drove the bison to extinction in a calculated scorched-earth tactic that was part of a larger ethnic-cleansing agenda. As the Potawatomi author and scientist Robin Wall Kimmerer put it in a recent essay, “the Indigenous idea of land as a commonly held gift [was replaced] with the notion of private property, while the battle between land as sacred home and land as capital stained the ground red.”

How could the white settlers bring themselves to do it?

They did it by telling a certain story about Native peoples, a story that said Native peoples were less “civilized” than white settlers and therefore deserved to be terrorized and pushed from their lands. This Doctrine of Discovery was a religious belief for many European settlers. The doctrine said that any land “discovered” by Christians was theirs because of the inherent inferiority of non-Christian peoples. Eventually, this pernicious idea made its way into US law. In 1823, the US Supreme Court, in the case of *Johnson v. M’Intosh*, ruled that “the principle of discovery gave European nations an absolute right to New World lands.”

It’s no secret that our country was built on a foundation of enslavement of Black people, the theft of Native land, and near genocide of Indigenous people. US institutions, from our government to Ivy League colleges, were built on a foundation of stolen labor and stolen bodies. The compound interest on the profits from that enslavement became the basis of intergenerational wealth for white communities—the intergenerational wealth that perpetuates race-based economic inequality to this day.

But the past isn’t past. Structural racism continues 150 years after the abolition of slavery, only in new forms. As Michelle Alexander wrote in her best-selling book, *The New Jim Crow*, white supremacy has evolved over generations. After slavery came the debt-servitude of sharecropping. After the Jim Crow era was brought down by the civil rights movement, the prison industrial complex and the war on drugs (read: the war on Black people) rose in its place.

When a kid in East Oakland gets asthma from car pollution because her neighborhood is surrounded by freeways, that is white supremacy.

How does this all connect to today’s environmental crises? It’s all part of the same story of dehumanization. The pollution-spewing global mega-corporations that created Cancer Alley are just the latest evolution of the extractive white-settler mindset that cleared the forests and plowed the prairies. And just as the settlers had to believe and tell stories to dehumanize the people they killed, plundered, and terrorized, today’s systems of extraction can only work by dehumanizing people. Back then we had the Doctrine of Discovery, and today it’s the doctrine of neoliberalism that say it’s OK to value some lives more than others, that it’s OK for some people to have clean air while others struggle to breathe.

The crimes may be hiding in plain sight, but many white people are socialized to ignore how these systems of violence and inequality show up in our society. When it comes to racism,

many white people are like fish swimming in water: White supremacy is so pervasive that it's hard to even know that it's there.

The richest people need for white supremacy to remain invisible so they can continue to plunder our planet. They need those sacrifice zones, and the racism that justifies them, or they'll have nowhere to put their trash and pollution. In this way, white supremacy serves to divide white working people from Black working people. Today's one-percenters are able to sacrifice whole communities using more or less the same methods the settlers used: By dividing people into racial categories and directing the worst of their abuse at the people at the bottom of a manufactured racial hierarchy. There's a term for this: It's called punching down.

This punching down usually comes in the form of blame. Media and popular culture often broadcast a twisted version of Black life and make it seem like communities of color have caused their own problems. Many people (at least half of Republicans, according to one poll) believe that poor people are poor because they are "lazy." From there, it's not much of a jump to believe that "some people" deserve to live next to a coal plant, that they deserve to die of cancer, that their children deserve to live with asthma.

Working-class whites are told a story that such a thing could never happen to *them*. Since the founding of this country, elites have conspired to divide poor and working people by race. Just think about Bacon's Rebellion, when a wealthy white land-taker led a multiracial group of indentured servants and enslaved people on a mission of violence against local tribes. Afterward, frightened by the cross-racial uprising that had destroyed the state capitol, Virginia leaders began to offer more rights and privileges to white indentured servants to keep them from allying with enslaved African people and rising up against their rulers. They offered slightly better conditions to the white people they exploited, to keep them from seeing what they had in common with enslaved Africans and Indigenous peoples.

That same racist bargain—"You might be poor, but at least you're not Black"—is alive and well in America today.

Now polluters tell low-income white families, "Only someone who doesn't deserve anything better for themselves and their family would choose to live in such a polluted place as Cancer Alley." If they just pull themselves up by their bootstraps, the story goes, white people can work themselves out of the poverty and environmental injustice they experience alongside Black people. Because, after all, at least they're not Black.

In the Trump era, messages that blame Black folks for our own persecution come even from the White House. The Trump administration tries to explain away the fact that Black communities are dying at elevated rates from COVID-19 by pointing to preexisting health conditions, yet ignores that those health conditions are the result of generations of racism. The administration ignores the fact that the facilities that cause asthma are located in Black neighborhoods. It ignores the fact that living in a society that treats Black people as less than human causes stress on the heart, literally and metaphorically. According to the Harvard School of Public Health, “Being a person of color in America is bad for your health.” Put another way, Black folks’ only preexisting condition is being Black.

I’m still left wondering, how can they bring themselves to do it?

- I think the answer has to do with the stories a lot of white people tell themselves. Stories that often boil down to a notion that Black people are always guilty and the cops (or the corporation) are always right. Stories that take the form of “he shouldn’t have resisted arrest.”

If all of this seems too neat a narrative, I’d ask if you remember Hurricane Katrina. In the aftermath of the storm, Black people who were just out looking for essential supplies were described by the news media as “looting” a grocery store. White people who were doing the same thing were described as “finding” bread and water. I’d ask if you remember Eric Garner and Dylan Roof. Eric Garner was choked to death by police for selling “loosies,” or single cigarettes. Dylan Roof murdered nine Black people during a Bible study group at their church; after being arrested, the police bought him a meal at a Burger King on the way to the police station.

Are you with me?

By dividing us up into racial categories and economic classes, the one-percenters keep us from seeing that 99 percent of us share the same problems. By focusing their extraction and pollution on Black communities and working-class families, big polluters have bought the silence and collusion of white Americans.

But let’s be real: White privilege offers no escape from climate chaos. Nobody reading this is going to get a spot on the SpaceX shuttle to Mars (if you think so, that’s white supremacy messing with your head). Earth is the only planet we get. And, thanks to polluters who profit from exploiting Black and brown communities, we’re in the process of making it uninhabitable.

Just as the settlers had to believe and tell stories to dehumanize the people they killed, plundered, and terrorized, today's systems of extraction can only work by dehumanizing people.

When Amy Cooper, a white woman, has an encounter with a Black man birdwatching in Central Park and calls the police—that is white supremacy. She weaponized the police and used them to racially terrorize someone. She knew what she was doing. She knew her threat had power because her target, Christian Cooper, understood the historical relationship between the police and Black people.

When a petroleum pipeline corporation calls in the police to bash Indigenous water protectors at Standing Rock, that too is white supremacy. It's like the Amy Cooper–Christian Cooper incident but on a systemic scale in which a fossil fuel company weaponizes the police to racially terrorize Indigenous peoples.

When a kid in East Oakland gets asthma from car pollution because her neighborhood is surrounded by freeways, that is white supremacy.

When the Dakota Access Pipeline is built through Native land because the neighboring white communities fought to keep it out of theirs, that is white supremacy.

When the United States pours carbon pollution into the air, knowing that people in countries that have contributed much less to the climate crisis will face the worst of the consequences, that is white supremacy.

When big polluters try to buy our democracy so they can keep making money by devaluing the lives of people of color, that is white supremacy.

When you come to see and understand these intersections between white supremacy and environmental destruction, you'll find yourself at a crossroads. That crossroads will force you to decide which side you're on.

You can choose—we as a society can choose—to live a different way. Indeed, we must. If our society valued all people's lives equally, there wouldn't be any sacrifice zones to put the pollution in. If every place was sacred, there wouldn't be a Cancer Alley. We would find other ways to advance science and create shared wealth without poisoning anyone. We would find a way to share equally both the benefits and the burdens of prosperity.

If we valued everyone's lives equally, if we placed the public health and well-being of the many above the profits of a few, there wouldn't be a climate crisis. There would be nowhere to put a coal plant, because no one would accept the risks of living near such a monster if they had the power to choose.

Critics of the Black demand for justice and equality like to respond by saying "all lives matter." It's true; they do. In fact, that's the very point of the chants and banners and signs in the streets. After centuries of oppression, the insistence on Black dignity is a cry for universal human rights. If Black lives mattered, then *all* lives would matter.

I know that what I've laid out here is a lot of dots to connect. I can imagine you thinking, "OK, so how do we end white supremacy then?"

I wish I had all the answers, but I don't. The answer is for all of us to figure out together.

All I know is that if climate change and environmental injustice are the result of a society that values some lives and not others, then none of us are safe from pollution until all of us are safe from pollution. Dirty air doesn't stop at the county line, and carbon pollution doesn't respect national borders. As long as we keep letting the polluters sacrifice Black and brown communities, we can't protect our shared global climate.

I also know that as long as police can take Black lives, then none of us are truly safe. I keep coming back to the murder of George Floyd, the nine minutes a cop took to bring the drumbeat of George's heart to a standstill. I keep asking again and again, How could they bring themselves to do it?

And now I ask you, What will you bring yourself to do?

CRITICAL POINTS shared by the community and Judge Hammer:.

- 1) The Court's ruling emphasized the distinct statutes regarding zoning ordinances as directed by the WV State Code and notes that compliance is not at the unilateral discretion of a municipality.
- 2) The Comprehensive Plan is clear: that the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must not approve this proposed zoning change
- 3) The City of Ranson has a MORAL as well as legal obligation to protect the citizens of Ranson as well as its neighbors.
- 4) The industry that this rezoning will provide produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.
- 5) The City should not take any actions that would enable industry that will endanger the health, safety, or welfare of the community. Any actions taken need to honor the Comprehensive Plan that was approved prior to 20017-302.
- 6) The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.
- 7) Heavy industry commonly has high levels of air emissions and markedly increases large truck traffic. Rockwool, for example, will emit 392 tons per year of total hazardous air pollutants and increase local traffic by over 100 large trucks per day. This is not appropriate to be close to schools. Children are exquisitely

sensitive to pollution. Air pollution is known to cause multiple non-communicable diseases in children, exacerbates existing disease and increases the rate of disease in adulthood. Air pollution causes cancers and respiratory, autoimmune, hematologic, and neurodevelopmental diseases in children. In addition to the physiologic effects of air pollution, there are a myriad of psychological effects. These challenges lead to negative effects on almost every lifetime metric studied including lifetime achievement, earnings, and suicide rates. According to the CDC, there is no safe level of exposure to carcinogens, and when simply having a large intersection near a school can cause measurable effects, how could we allow heavy industry less than 2,000 feet from an elementary school?

8) Environmental discrimination, sometimes referred to as environmental racism, refers to the institutional rules, regulations, policies or government and corporate decisions that deliberately target certain communities for locally undesirable land uses and lax environmental laws, resulting in communities being disproportionately exposed to toxic and hazardous waste based upon socioeconomic characteristics. This is exactly what is happening here. This is one of the most economically disadvantaged areas in the county. For example, the two closest schools to the site are both Title 1 schools (school districts and schools with high numbers or high percentages of children from low-income families). This change in zoning is an egregious example of the institutional regulations used to perpetuate environmental discrimination This cannot be allowed to stand in Jefferson County

9) Ranson's irresponsible environmental actions can result in surrounding states to take legal action against the city including but not limited to Formal Letters of Protest, requesting both state and federal Environmental Protection Agencies to initiate cease and desist orders including fines. Ranson creating environmental havoc is costly and unjustified when considering the greater good, and

10) The industries being promoted will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

11) Proposed actions being taken will promote pollution and threatens the well being of the community as a whole and unfortunately can only be classified as infamous. Is that the legacy the Ranson Council wants to perpetuate?

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City

Stacey Pfaltzgraff

From: Susan Brousseau <Ohauna@icloud.com>
Sent: Tuesday, June 16, 2020 7:37 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--

Susan Brousseau
Ohauna@icloud.com

Rockwool – Support Letter

June 17, 2020

Via email

To: spfaltzgraff@ransonwv.us

Ranson City Council

Thank you for making Ranson a great place to work, live, and relax. Thomas Jefferson once said it was such a beautiful place to see it was worth the voyage across the Atlantic Ocean and I agree.

The Potomac Edison Company (“Potomac Edison”) recommends Ranson City Council approve Proposed Ordinance #2017-302: “An ordinance amending and re-enacting the official zoning map of the city of Ranson pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: ‘Jefferson Orchards’ Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1)”.

Readopting the Industrial Zoning classification that Rockwool needs to construct and operate its facility in Ranson, West Virginia has many positive benefits for the city. Potomac Edison believes it is in the best interest of Jefferson County and the state of West Virginia for this project to move forward for the following reasons:

The economic impact of a \$150 million capital investment in the community is significant and will provide many benefits. During construction, it will provide good jobs for the 250-275 full-time construction workers that are on-site each day. Once the facility is completed, Rockwool will employ 150 well-paying manufacturing jobs across all trades. In addition, the spinoff created in Jefferson County as a result of the facility being constructed in Ranson, is estimated to help create another 150 jobs in the service, maintenance, technical, trucking, and raw material sectors. The tax revenues generated by this capital investment and employees’ income is significant.

Potomac Edison recently completed significant electrical system upgrades to provide reliable electric service to Rockwool and the Jefferson Orchards’ area. These upgrades should allow the City of Ranson and Jefferson County to more easily attract additional economic development investment and jobs into this area. The upgrades to the system will also make electrical service more accessible and reliable for the citizens and businesses served in that corridor.

Attracting electric users like Rockwool into Potomac Edison’s service territory is good for all our West Virginia customers. Customers like Rockwool allow our fixed costs to be spread out more, which can result in lower bills for our customers, including the City of Ranson.

For these reasons and many more, Potomac Edison supports the attraction of economic development projects in our service territory and believes readopting the Industrial Zoning that Rockwool needs in the City of Ranson should be approved. It will be an economic benefit to the City, County, Businesses, Citizens, and many others in the area.

If you have any questions, please reach out to me.

Sincerely,



Thomas Butcher
Regional External Affairs
901 Wilson Street
Martinsburg, WV 25401
Tbutch2@firstenergycorp.com
304-671-3860

Stacey Pfaltzgraff

From: Judith Cain <jscaïn5@hotmail.com>
Sent: Thursday, June 18, 2020 8:45 AM
To: Stacey Pfaltzgraff
Subject: Stop Rockwool

CAUTION: External Email

Please do not approve rezoning for heavy industrial use resulting in Rockwool opening their plant in Ranson, WV.
Stop Rockwool.

J. Cain

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June 7, 2020

Stacey Pfaltzgraff

City of Ranson, West Virginia

I am writing to provide input for your June 23 meeting regarding Rockwool. As you may know, Blue Ridge provides training and education to many regional employers. We work closely with employers to develop curriculum and delivery methods for new hires and for incumbent workers. It is quite advantageous to be able to work with advanced manufacturing companies such as Rockwool as it provides a mutually beneficial relationship where our faculty collaborate with cutting edge manufacturers to produce a high quality curriculum and highly qualified workforce.

It is important to have industrial customers in the creation and implementation of programs. Without it the curriculum quickly becomes stale and out of date. The relationship keeps our faculty relevant and up to date on the ever changing world of technology in advanced manufacturing and ensures that our community college can produce the best qualified employees to meet the challenge of global competition.

Blue Ridge is eligible for state grant funding to help with the expense of training and we have been successful at attracting many employers to our area with the combination of potential funding, curriculum development, delivery of training and education, and in the case of many employers, safety training. Our list of companies that we have collaborated with include Procter & Gamble, Macy's, Hollywood Casinos, Technimark, Logoplaste, and many others in the advanced manufacturing and distribution arena.

Blue Ridge is developing the curricular pieces of our relationship with Rockwool. This training is largely devoted to advanced manufacturing in the areas of mechatronics and information technology. In our view, producing a well-educated workforce is a primary role of today's community college and we are happy to do so.

Safety training is an integral part of the training that we deliver. It helps to assure that employees are able to work in a modern manufacturing plant in a controlled environment and to significantly reduce risk. We have developed and implemented a safety training program for many companies in our region.

The learning program for Rockwool will be tailored to their plant and particular equipment and the basic principles of the program are applicable to many locations and employers. Rockwool will provide a great benefit to our graduates in that they will have many employment opportunities and can earn a decent living wage and be productive citizens.

Thank you for considering the input from Blue Ridge Community and Technical College.

Sincerely,

Peter Checkovich, President

Stacey Pfaltzgraff

From: Emily Chiappinelli <emily@groupmuse.com>
Sent: Tuesday, June 16, 2020 8:13 PM
To: Stacey Pfaltzgraff
Cc: Duke Pierson; Gene Taylor; Don Haines; Scott Coulter; Mike Anderson; Amanda Stroud
Subject: Written public comment period email regarding Rockwool

CAUTION: External Email

Hi there,

I'm reaching out as a young person who moved from NYC to Charles Town 2 and a half years ago now. I moved here because I deeply admire and respect this area of the world -- its gorgeous nature and the impact and influence that it has on the local culture and people. I love being a part of this county and to see the deep ties people feel to this land.

I was so crushed shortly after I moved here to learn about Rockwool, and the process through which they have arrived in this county. I attended a public hearing and was shocked and disappointed at the lack of consideration demonstrated by the representatives of this company, especially given the enormous unified outpouring against their presence here.

I am begging you to not accept the special district industrial zoning; I am begging you to stop Rockwool from building their factory. I want to stay here and I don't want to see this place negatively impacted by yet another toxic polluter, like SO MUCH of this state. I am so disappointed. Please do the right thing and DO NOT let the proposed rezoning go through. So many people are depending on you.

All best,

Emily

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kathy Ann Clowe <kathyannclowe@yahoo.com>
Sent: Wednesday, June 17, 2020 8:47 AM
To: Stacey Pfaltzgraff
Subject: Zoning

CAUTION: External Email

Hello,

I am a resident of Jefferson County, and a voter. I am emailing you to let you know that I am **OPPOSED** to further development of the Rockwool facility and the re-zoning of the property at Jefferson Orchards.

I think the original zoning changes that allowed Rockwool to build there were done poorly. I feel like the county council made a decision based on their interests and did not get input from the residents like they should have. It felt sneaky and underhanded. This is a great opportunity for the council to rebuild trust with the community and listen to what residents want.

We **DO NOT** want more industry and for this area to turn into an industrial zone. The meager job benefits provided do not outweigh the costs that the citizens of the county have to pay in terms of our health, agriculture and the environment. Please listen to what we want. That's what you were elected to do! To represent us! Not to get money or make sneaky decisions based on benefits to yourselves.

Thank you in advance for listening to our input.

Thank you,

Kathy Clowe

Local citizen and voter and opponent to turning our lovely county into an industrial zone

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: clowegirl9@yahoo.com
Sent: Wednesday, June 17, 2020 12:59 PM
To: Stacey Pfaltzgraff
Subject: Jefferson County Development

CAUTION: External Email

Good Afternoon,

I am a Jefferson County resident and I am writing to express my opposition to further development and/or rezoning of Jefferson Orchards.

Please do not allow our beautiful county to be turned into an industrial zone.

Sincerely,

Michelle Clowe

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)



17 June 2020

Ranson City Council
312 S. Mildred St.
Ranson, WV 25438

Subject: Comments on Proposed Ordinance #2017-302

Dear Ranson City Council:

Please accept these comments on Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)".

Roxul USA, Inc. ("ROCKWOOL") acquired the above referenced property (hereinafter referred to as the "RAN-5 Site" or "Site") from Jefferson Orchards, Inc. (Jefferson Orchards) on 20 October 2017. Prior to ROCKWOOL's acquisition of the Site, Jefferson Orchards operated the Site as a fruit orchard, including the storage, mixing, and routine application of pesticides. Additionally, a former pesticide mixing station was previously located in the central portion of the Site. Based on historical orchard operations having potentially contaminated the Site, ROCKWOOL elected to investigate and remediate the Site pursuant to the West Virginia Voluntary Remediation Program (VRP). In July 2017, WVDEP accepted the Site into the VRP and provided public notification of the project.

In accordance with requirements of the VRP, ROCKWOOL performed a comprehensive investigation of soil and groundwater at the Site under the direction of a Licensed Remediation Specialist (LRS), and by oversight from the WVDEP Office of Environmental Remediation (OER). Additional VRP activities conducted by ROCKWOOL included excavation and disposal of over 130 tons of pesticide-impacted soils from the former mixing station area, and evaluation of residual risks to human health and the environment. VRP-related activities conducted at the RAN-5 Site represent an investment by ROCKWOOL of over \$400k, demonstrating the company's commitment to sustainable development and protection of the environment.

The RAN-5 Site was remediated to meet industrial remediation standards in accordance with the VRP, and was not remediated to meet residential standards. Findings of the residual human health and ecological risk assessment indicated that future industrial use of the Site is appropriate.

Based on the RAN-5 Facility being remediated to meet industrial standards, a Land Use Covenant (LUC) is being executed for the Site which prohibits residential use of the Site and the extraction of groundwater for drinking water and potable use. The LUC serves as an administrative control in perpetuity for the Site to ensure the protection of human health and the environment, and is a commonly used remedy on many other VRP sites. As a condition of the LUC, ROCKWOOL is required to submit an annual LUC inspection report to the WVDEP to ensure conditions of the LUC are being maintained.

Thank you for the opportunity to submit these comments for consideration by the City of Ranson.

Sincerely,



David T. Connelly, LRS
Senior Project Manager, ERM

Stacey Pfaltzgraff

From: Aileen <acurfman@gmail.com>
Sent: Saturday, June 13, 2020 9:39 PM
To: Stacey Pfaltzgraff
Subject: Rezoning Ordinance #2017-302

CAUTION: External Email

To: Stacey Pfaltzgraff, Ranson City Clerk
 Keith Pierson, Mayor of Ranson
 Donnie Haines, Ward 1 Council Member
 Scott Coulter, Ward 2 Council Member
 Mike Anderson, Ward 3 Council Member
 Amanda Stroud, At Large Council Member
 Gene Taylor, At Large Council Member

RE: Rezoning Ordinance #2017-302

I am writing to express my opposition to Ordinance #2017-302 to amend the zoning map of the City of Ranson.

The annexation of the Jefferson Orchards site provided Ranson with a great opportunity to develop the city in a way that would enhance the quality of life for residents of Ranson and for neighbors of the newly annexed area.

Instead, the proposed zoning ordinance supports industrial development that will create challenges to maintenance of acceptable air and water quality. With this ordinance in place, where we once had a rural scene that refreshed the spirit, we now will be forced to look at ugly factories. Peace and quiet will be replaced with traffic and noise. This is not what our people want. It does not benefit the residents of Ranson, and it doesn't benefit their neighbors throughout the Eastern Panhandle and the Tri-State region.

Our local economy is largely based on providing housing for those who don't want to live in an urban environment, and on tourism for those who need a brief escape. We have thriving mom-and-pop businesses engaged in everything from agriculture to lodging to retail, tech and light manufacturing. Big, ugly, dirty factories will destroy the existing economy of Jefferson County. The ultimate result of industrialization will be the loss of population and the eventual abandonment of the factory, leaving us with a brownfield that will need an expensive cleanup.

Please don't allow this to happen. Please oppose Ordinance #2017-302.

Sincerely yours,
 Aileen Curfman
 1067 Comstock Dr.
 Shepherdstown, WV 25443
acurfman@gmail.com

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Charles Town, WV 25414
June 17, 2020

Stacey D. Pfaltzgraff
Ranson City Clerk
Ranson, WV

Ms. Pfaltzgraff,

This is my written comment for the second public hearing (June 23, 2020) on the Jefferson Orchards (Rockwool) Special District Industrial/Industrial Special District rezoning ordinance. Please let me know if a city representative will read this on my behalf. If not, will another proxy read this for me?

I am providing alternate prevailing wind information to that posted by at least one Rockwool toxicity/stoppage organization. I also am providing the definition of smog.

350 Loudoun (350loudon.org) posted a map indicated factory prevailing winds from the WNW direction, which would blow any industrial emissions over the north portions of Loudoun County, Virginia. According to data posted on weatherspark.com, the wind direction for Ranson, WV (the industrial site) is actually “most often from the south for 1.5 months...[and] most often from the west for 10 months [each year].”

So it is my duty to observe that Loudoun County has less reason to be concerned than, say, Shepherdstown and portions of Western Maryland (Sharpsburg, Antietam, Boonsboro, Gathland State Park, Gambrill State Park, Greenbrier State Park, and portions of the Appalachian Trail). Prevailing winds would likely blow industrial emissions into the hills and Potomac River valley to the east and north of the work-in-progress (Rockwool) industrial site.

According to National Geographic, smog is air pollution that reduces visibility and most smog that one would see (or have difficulty seeing through) is known as photochemical smog. Photochemical smog is produced when sunlight reacts with nitrogen oxide and at least one volatile organic compound (VOC) in the atmosphere. Factories emit nitrogen oxides and VOCs. When sunlight hits these chemicals, they form airborne particles and ground-level ozone—or smog. Ozone in the proximity of the ground (on a hill or mountain) is dangerous to people with respiratory illnesses like asthma.

Cities located in basins surrounded by mountains may have smog problems because the smog is trapped in the valley and cannot be carried away by wind. Los Angeles, with mountains to its east and south, has high smog levels. The Ranson, WV area has mountains to its east and south.

A publicly-minded and health conscious municipality or county would not rezone land such that industrial air pollution (nitrogen oxides and VOCs) would impair outdoor recreation, tourism and/or citizen health. I will leave it to hydrologists and earth scientists to comment on possible water table impacts in Ranson's 'karst' (limestone with underground holes, streams, and caves) topography.

Thank you for reading this comment.

Regards,

Chris Damm
Systems Engineer, Charles Town

Stacey Pfaltzgraff

From: Chris Dardick <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 11:03 AM
To: Stacey Pfaltzgraff
Subject: No Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

In July, 2019 I sold my house in Shenandoah Junction to downsize. We had an extremely difficult time selling, in part, due to the concerns about construction of the Rockwool plant so close to our neighborhood. We had at least 3 potential buyers state this as the reason to not submit an offer. There were likely many more who simply refused to look at homes so close to the future factory. We were fortunate to find a buyer after 1 year on the market but at a much reduced price.

By approving this zoning change, Ranson will cause tens of millions of dollars in lost residential property values and forever change the character of Jefferson County. Whatever cost you believe may be exacted by Rockwool if you don't approve will be dwarfed by the impact on property values and lost opportunity costs for residential construction and service industry businesses. Collectively this could amount to over \$100 million. As a public servant you have the responsibility to carefully weigh these issues in making a decision. I plead with you to please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Chris Dardick
 cdardick@comcast.net
 32 King Lear Drice
 Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: DELORIS <cirnexp@comcast.net>
Sent: Tuesday, June 16, 2020 7:49 PM
To: Stacey Pfaltzgraff
Subject: Ordinance#2017-302

CAUTION: External Email

Vote YES on this ordinance. There are more true Jefferson County citizens who are for Rockwool than these protesters think.

Sent from Xfinity Connect Application

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)



SHEPHERDSTOWN FIRE DEPARTMENT, INC.

8052 Martinsburg Pike • PO Box F • Shepherdstown, WV 25443
 (304)876-2311 • www.shepherdstownfiredepartment.com

June 15, 2020

Shepherdstown Fire Department
 Marshall DeMeritt, EMS Chief
 8052 Martinsburg Pike; P.O. Box F
 Shepherdstown, WV 25443
mddemeritt@gmail.com
 540-742-8190

RE: Public Comment on Land Use/Zoning

To Whom It May Concern:

I understand the idea of zoning regarding the parcels now known as the Rockwool site, and adjoining lots, is back before the Ranson government. As a leader of the organization responsible for the Fire and EMS service to this immediate area, and surrounding Kearneysville area, I wanted to take a moment to ensure that from an emergency services perspective, I find no issues with this land being used in such a manner as "heavy industry." The ingress/egress to the area is substantial, and better with recent improvements, and this area offers two access points (one off Charles Town Rd., and another off Stubbs Road) making it easily accessible for heavy apparatus. Major roads are easy to follow for emergency response, if needed, and provide a quick and efficient response should that be needed.

Speaking not on behalf of my organization, but as a leader within the emergency services of Jefferson County, having knowledge of the layout, access and egress, I find no issues with the proposed zoning of the area.

Respectfully,

Marshall DeMeritt, MS, IMC, NREMT
 EMS Chief

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Faint, illegible text at the top of the page, possibly a header or title.

Stacey Pfaltzgraff

From: Emily Dragon <info@sg.actionnetwork.org>
Sent: Wednesday, June 10, 2020 12:47 PM
To: Stacey Pfaltzgraff
Subject: Please Vote No to Heavy Industry Rezoning at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

I am writing to urge you to stand against heavy industry rezoning at the Jefferson Orchards site.

I live closer to the site than the vast majority of the city of Ranson and I am incredibly concerned about the welfare of my family and the families that live around me if Jefferson Orchards is allowed to be rezoned to allow heavy industry. When we moved to our home we specifically looked at the land uses and zoning around the areas we were considering and were completely shocked when we heard years later that Ranson was considering allowing a major polluter where we thought they would never be permitted. Especially concerning is the area's proximity to several schools and daycare facilities.

There are -so- many reasons that a facility like Rockwool, or ANY major polluter, would be a terrible fit for our county and that space in particular, but my primary concerns are the additional pollution that would be present at the nearby schools and in the county as a whole during our valley's weather inversions as well as the potential for toxic materials to end up in our water if a spill should occur. Karst topography is known to be easily contaminated and almost impossible to clean up and a large part of our county relies on well water.

I understand that when the council initially approved of allowing heavy industry at Jefferson Orchards a lot of the current research into the consequences of rezoning that space was unknown. Now, several years later, enough data has been discovered and presented in public meetings that ignorance is no longer a valid excuse.

Rezoning that space is an incredibly and unprecedentedly unpopular move that is clearly against the will of the majority of the citizens of our county.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson and vote NO on heavy industry in Jefferson County.

Thank you for your consideration.

Emily Dragon
emmilely@gmail.com
187 Steeple Chase Dr.
Shenandoah Junction, West Virginia 25442

Stacey Pfaltzgraff

From: Doug Everhart <Doug.Everhart@me.com>
Sent: Sunday, June 14, 2020 8:56 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on #2017-302. The air emissions, possibility of ground and surface water contamination, and their effect on our interwoven economies threaten the health, safety and welfare of not just Jefferson County but the greater region, including Loudoun and the greater Northern Virginia area.

This zoning would provide for industry that produces large amounts of air emissions. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. Northern Virginia is directly downwind from these emissions. Much of the gaseous, fine particulate, and hazardous emissions can reach Northern Virginia. Further affecting the outdoor air quality of the adjacent portion of Virginia and the ability of these areas to achieve and maintain National Ambient Air Quality Standards (NAAQS) attainment. This will affect agriculture and outdoor leisure and recreation.

For example, Loudoun County has been in nonattainment for the NAAQS 8-hour Ozone standard for the past two years. VOC and NO_x react after they have been emitted to produce ground level ozone. The industry that this rezoning would provide for would produce large amounts of these emissions. This would make it even harder as Loudoun County tries to achieve attainment. As time goes on and the scientific research advances our knowledge and understanding of the extent to which gaseous, particulate and hazardous emissions affect human health the NAAQS standards are likely to be reduced. The effects on air emission from this rezoning will make it only harder for Loudoun and Northern Virginia to meet these standards.

In addition to the concerns about the air, the possible ground and surface water contamination is very concerning to Loudoun and Virginia residents. The site is known to have ground water that is vulnerable to contamination due to the karst hydrogeology. A USGS study demonstrated that the ground water adjacent to the site to be rezoned communicates readily with surface water tributaries of the Potomac River. In addition to direct infiltration where water moves directly from the surface to groundwater via porous limestone bedrock, karst is known to have severe ground instability problems. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater. This makes the aquifer vulnerability in karst areas very high, and contamination with industrial activity such as that provided for by this rezoning too likely.

Loudoun sources its drinking water from the Potomac River, downstream of many West Virginia tributaries that carry water from the epikarst and groundwater aquifer at the site to be rezoned. Loudoun has recently completed the new Trap Rock Water Treatment facility, which draws water from the Potomac River. Loudoun currently provides 40 million gallons and projects to provide 90 million gallons of drinking water a day to customers by 2040
<https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fLoudounwater.org&c=E,1,H1cewstZCOO05-lcjIzSEaa->

Xr60D5Wolxlm0Edz2KZesjg-Q1cK0Ony_ZtBYIKLjNBhkdXVcXueKjx9Y81zeDZQZiLYXso5WA2tT_V4VcxOKw,,&typo=1). Therefore, the viability of the Potomac River is a high priority for Virginia residents.

Loudoun and Northern Virginia is one of the fastest growing communities in the country and provides a lot to Jefferson County in their symbiotic relationship. Virginia residents support and enjoy Jefferson County through tourism, as our residents enjoy the natural and historical resources of your county. Virginia residents and businesses support the equine industry in a multitude of ways from providing wagering fans at the races to the Virginia Breeders Association Virginia Certified incentive programs and a strong market for retired racehorses. According to an economic impact study from WVU, at least 40% of Jefferson County residents travel outside of West Virginia for work, a good percentage of those travel to northern Virginia. This rezoning would allow for industry that would negatively affect the economy of both places and this relationship and the benefits for our residents gleaned from it.

This zoning change will provide for industry that will negatively effect the health safety and welfare of the Loudon and Northern Virginia community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Doug Everhart
Doug.Everhart@me.com
Sterling 20164

Stacey Pfaltzgraff

From: Colleen Fechner <gregandcolleen@ymail.com>
Sent: Wednesday, June 10, 2020 11:27 AM
To: Stacey Pfaltzgraff
Subject: Rockwool

CAUTION: External Email

To Whom It May Concern:

I am AGAINST rezoning the orchard for industrial use. I do not believe it is in the best interest of the people of Ransom or Jefferson County, especially the children. I do not want to see Rockwool in our county. We must protect our county for future generations. It will only damage our health, agriculture, tourism, etc. Some say there is proof. Some say there is no proof. I say, why risk it? Our children deserve for us to err on the side of caution. Don't they have enough to deal with?! Choose the people of Jefferson County instead of Rockwool.

Colleen Fechner

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Lynn Folk <lynnfolk55@gmail.com>
Sent: Wednesday, June 17, 2020 2:48 PM
To: Stacey Pfaltzgraff
Subject: Re-zoning of Jefferson Orchard property

CAUTION: External Email

To the Ranson Zoning Board

Though this request a little late in coming, this is my opinion. The re-zoning issue was in my opinion a dis-service to all residents of Jefferson County. In order for the property to be re-zoned and allow heavy industry to purchase said property, should have been ballot issue for residents to vote on. Not for one municipality to determine what was for the best interest of the county.

Many years ago there was a special election just to allow gaming at Charles Town Racetrack, now known as Hollywood Casino. Because of the opposition from church leaders, the increase in traffic and other numerous issues.

Why was there not a special election to vote this heavy industry in our county? Or even the re-zoning of the property? Because the City of Ranson would not win.

The City of Ranson Mayor and Council should be ashamed of themselves, for allowing this to be an issue in the first place.

Thank you for giving me the time to voice my opinion on this matter. I have been a resident and voter in Jefferson County for 39 years.

R. Lynn Folk

Stacey Pfaltzgraff

From: Edward Erfurt
Sent: Monday, May 18, 2020 12:22 PM
To: Stacey Pfaltzgraff
Cc: Tony Grant
Subject: FW: Amending the Zoning Map for Jefferson Orchards

For Public Comment

Edward W. Erfurt IV
 Assistant City Manager
 Community Development

City of Ranson
[312 South Mildred Street](#)
[Ranson, WV 25438](#)
 (o) 304-724-3861
 (c) 304-283-2260
eerfurt@ransonwv.us

From: Charlotte Fremaux <cmfremaux@gmail.com>
Sent: Monday, May 18, 2020 12:12 PM
To: Edward Erfurt <eerfurt@ransonwv.us>
Subject: Amending the Zoning Map for Jefferson Orchards

CAUTION: External Email

Dear Asst. City Manager Erfurt:

I am writing today to express my disapproval of your plan to revisit revising zoning in Ranson to allow for more heavy industry to be an existential threat to our way of life in Jefferson County. Aware as you are of the ferocity of the protest over the Rockwool plant, it is beyond comprehension that you think the now-well informed public is going to roll over and allow your plan for industrialization to go forward. Our protest against your plan is not going away and not giving up: your former use of stealth and subterfuge in attempting to abandon sustainable development in favor of a fast deal with a multinational corporation has foisted upon a previously unprepared public a change no one wanted.

Judge David Hammer ruled that you did not fulfill state public notice requirements in Jefferson County's newspaper of record before changing the zoning map for 500 acres of Jefferson Orchards to create an Industrial District that has allowed for the building of the Rockwool plant. The "failed amendments" were due to your haste to shove through the necessary changes before the public fully comprehended what the ramifications of such a project would mean for our way of life, our environment, and the public health of our residents. Mayor Pierson is now asking the council go through proper channels so that you can rezone the land again to allow more heavy industry. As the entire Rockwool project was conceived of and developed under a code name and largely in secret, your intent to deceive the public is clear. Be forewarned: the public you have deceived is not going to allow any more industrialization of our County.

In Judge Hammer's ruling, the Court has ordered the City of Ranson to advise, by July 3, 2020, its intent to address "the now failed amendments in their procedures to attempt the Industrial District Ordinance." Yet as it stands, the Court's decision has effectively reverted the Jefferson Orchards parcel to its prior use

classification, which prohibits any and all industrial uses. The Jefferson Orchards prior use classification as Smart Code - New Community that was in place before Ranson became involved with the Rockwool project, was overwhelmingly supported by a majority of County residents. I agree with Jefferson County Vision that the construction permits that were issued to Rockwool should be revoked, as they were issued under false pretenses.

I will reiterate: the majority of county residents do not want heavy industry. We oppose the Rockwool project as utterly inappropriate to the character of the county, and a threat to our economic interests, the environment, air and water quality, and our public health. The overwhelming majority of Jefferson County residents are united in opposing any further industry to be brought into the County.

Sincerely,

Charlotte M Fremaux
175 Fern Drive
Harpers Ferry, WV 25425
301-404-8639

Stacey Pfaltzgraff

From: Matthew Frey <matthewfrey@frontiernet.net>
Sent: Tuesday, June 16, 2020 1:15 PM
To: Stacey Pfaltzgraff
Subject: Vote No to Ordinance #2017-302

CAUTION: External Email

To whom it may concern,

I write to you to express grave concern regarding re-zoning Jefferson Orchards to "Special District Industrial" to accommodate Rockwool or similar heavy industry.

As light has shined over time into the shadows of non-disclosure agreements, secret meetings, and purposeful corporate mis-information, it is becoming clear that Rockwool or similar heavy industry poses a clear and present danger not only to our community's most precious resource—our children—but also to the very fabric of what makes Jefferson County special: its natural vitality, its bucolic character, and its historic charm.

Jefferson County is not an appropriate host for heavy industry such as Rockwool. Its economy is predominantly based on agriculture, equine pursuits, and tourism, all of which are incompatible with a toxically-emissive plant such as Rockwool or other heavy industry in a re-zoned Jefferson Orchards.

One could argue that the future jobs offered by industry at the site will outweigh any harm. Understand, however, that heavy industry jobs come at the cost of a far greater loss in jobs in other sectors of our local economy that will be lost as a result of the incursion of that heavy industry.

Environmentally speaking, the Jefferson Orchards site is unsound for heavy industry given its karst hydrogeology which makes wastewater from the site particularly concerning given that my home's well is interconnected to the aquifer over which Jefferson Orchards sits and into which any waste from the site will ultimately flow through the permeable substrate.

Further, it is clear, via sound independent scientific analysis, that the air models for the Rockwool site are fatally flawed. The Rockwool plant or similar plants will subject our school children, and local families to huge volumes of toxic emissions. It will not magically vanish into thin air.

Further, I do not welcome the inevitable increase in commercial vehicle traffic that rezoning will cause.

That all being said, my family should not be subjected to the effects of toxic heavy industry. Please keep your path forward aligned with Ranson's current 2012 comprehensive plan and correct course by voting no on this rezoning ordinance.

Regards,
 Matthew Frey
 Charles Town, WV

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Richard Friends II <strmohawk66@mac.com>
Sent: Monday, June 15, 2020 8:27 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Richard Friends II
strmohawk66@mac.com
Charles Town 25414

Stacey Pfaltzgraff

From: Callie Fulmer <callie@emailcallie.com>
Sent: Saturday, June 13, 2020 5:53 PM
To: Stacey Pfaltzgraff
Subject: Please reject the ordinance to rezone for Special District Industrial

CAUTION: External Email

Please **reject the ordinance to rezone for Special District Industrial and restore the Ranson Renewed vision.**

I live on the other side of the river, and changing the zoning to industrial will spew pollution all over my farm. I chose to live out here in the country, where the air is fresh and clean and so is the soil. Rockwool will change all of that.

The Ranson Renewed Vision gives a community, places for me to go and spend money, and brings more opportunities for the area.

Please, reject the rezoning.

**Callie Fulmer
Lovettsville, VA**

Sent from my Verizon LG Smartphone

Attachment: 20200623 - Written Comments - Packet #5 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: James Gatz <jimgatz@gmail.com>
Sent: Thursday, June 18, 2020 10:37 AM
To: Stacey Pfaltzgraff
Cc: James Gatz
Subject: Public Comment re Ordinance #2017-302

CAUTION: External Email

June 18, 2020

To Whom it May Concern:

I am writing to strongly encourage you to Vote NO on ordinance #2017-302.

I am very concerned that if this ordinance is enacted, the City of Ranson will once again allow more and more heavy, polluting, industry to come to the middle of our historic and beautiful county.

I have been told that this ordinance is out of line with the City of Ranson's long-standing comprehensive plan. While it is commendable for the City to zone land to accommodate industrial facilities, it is important that any such facilities must not have a negative impact on the well-being of the community, including the health, safety and welfare of our residents.

In addition, I strongly urge you to **Vote NO on ordinance #2017-302** given the reality that so many residents and business leaders throughout our county are opposed to allowing heavy, polluting industry in the middle of our county. The issue of bringing heavy industry to the City of Ranson has been a major community issue for more than three years. There is no doubt that many people are opposed to this strategy.

While some may argue that the City of Ranson made a mistake in its zoning procedures over the past couple years, I don't take that position. Rather, I ask that the City Council look to the future – not the past – and take concerted action to preserve and protect our county and its residents. **Vote NO on ordinance #2017-302.**

Many, many county residents will be proud of you and of the City of Ranson when this ordinance is defeated. We all will stand with you and support you in the effort to stop any further heavy industry that could have negative impacts on our beautiful county and our residents.

Sincerely,
 James Gatz

--
 James Gatz

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

To: Ranson, West Virginia City Council

312 S Mildred St,

Ranson, WV 25438

From: Dr. David Michael Glenn PhD. (retired Plant Physiologist, Director USDA-ARS-Appalachian Fruit
Research Station, Kearneysville, WV)



406 Glen Road

Shepherdstown, WV 25443

304-876-3505 chester4@comcast.net

Subject: Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I am opposed to this ordinance.

Enclosed are 15 statements based on scientific literature, EPA and WV data and Rockwool/ERM data that support the rejection of this ordinance.

I have also sent an electronic copy to the City Council for ease of distribution to council members.

Please read this information with an open mind and consideration for the future health and prosperity of Jefferson county and the city of Ranson, West Virginia.

The Board of Health and Safety shall have the authority to...
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Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Due to the process and total lack of transparency by the city of Ranson, WV to approve the zoning change to heavy industrial, the educated and experienced public input was ignored. A transparent and open discussion with the community could have either convinced Ranson city council this was an unacceptable fit or made improvements to the technology and manufacturing process of Rockwool that would not be harmful to the public and existing businesses.

Basic questions were never discussed with the community:

Why build a manufacturing plant across the street from an elementary school?

Why choose a site for the plant with the documented highest frequency of sinkholes in the county?

What is the cost: benefit of 150 medium wage jobs to reduce the agricultural productivity of soybean and equine health?

What is the cost: benefit of 150 medium wage jobs to negatively impact the health of sensitive adults and children with increased levels of ozone and particulate matter?

Below are Fifteen Facts to Oppose rezoning Jefferson Orchards "heavy industrial" to accommodate Rockwool Inc. in Jefferson County, WV

- 1) The COVID-19 pandemic has clearly demonstrated that simulation models are never absolutely correct. The decision to approve the Rockwool permit is based largely on modeled pollution dispersion data using AERMOD.
- 2) The AERMOD model is outdated and faulty in its projections of pollution dispersion, particularly at low wind speeds.
- 3) Rockwool projects it will annually emit 239 tons of Nitrogen Dioxides (NOx's) and 472 tons of volatile organic compounds (VOC's) which will react with UV during the May to September temperature patterns to produce ozone.
- 4) Jefferson county presently has ozone levels just below the 50 ppb 'Moderate' threshold indicating the EPA-designated-'Good' ozone level.
- 5) Increasing ozone levels to the 'Moderate' level will adversely affect 'sensitive' individuals working outdoors.
- 6) The current level of ozone in Jefferson county is already reducing soybean yield 5-10% through a chronic stress on photosynthesis. Any additional ozone will further decrease soybean yields of this major crop in the county.
- 7) Rockwool projects it will annually emit 134 tons of particulate matter less than 2.5 microns (PM2.5) and 154 tons of particulate matter less than 10 microns (PM10).

...the process and total loss of transparency by the City of Denver. We believe the...

...the process and total loss of transparency by the City of Denver. We believe the...

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...the process and total loss of transparency by the City of Denver. We believe the...

- 8) The World Health Organization of the United Nations has stated that there is no threshold for PM2.5 and PM10 below which no damage to health is observed ([https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)).
- 9) "Each 10 $\mu\text{g}/\text{m}^3$ m³ elevation in fine particulate air pollution was associated with approximately a 4%, 6% and 8% increased risk of all-cause, cardiopulmonary, and lung cancer mortality, respectively". Pope III, C.A., Burnett, R.T., Thun, M.J., Calle, E.E., Krewski, D., Ito, K. and Thurston, G.D., 2002. Lung cancer, cardiopulmonary mortality, and long-term exposure to fine particulate air pollution. *Jama*, 287(9), pp.1132-1141.
- 10) Jefferson county currently has approximately 8 $\mu\text{g}/\text{m}^3$ of PM2.5. Increasing PM levels will adversely affect human health in the area.
- 11) On average Jefferson county has calm winds (<3.5 mph) 30% of the time and one out of every 5 days, Jefferson county has calm air periods between 14 and 18 hours.
- 12) These calm periods are sufficient for PM2.5, PM5, ozone and PM10 to settle to ground level within Jefferson county.
- 13) The development of any air quality permit requires an air dispersal model of the potential effects in the area. This is performed by West Virginia Department of Environmental Protection (WVDEP) using the EPA model-AERMOD. Emission dispersal with calm winds (<3.5 mph) cannot be accurately modeled. Calm wind data are selectively eliminated from the AERMOD model using an established EPA protocol.
- 14) The West Virginia Department of Environmental Protection did not take the 30% calm wind characteristics of the area into consideration for the Rockwool Air Quality Permit.
- 15) The failure of WVDEP to account for calm wind conditions or worst case scenarios jeopardizes the health and safety of the population and the agricultural industry in Jefferson county.

Martinsburg, West Virginia is the site for an automated surface observation system (ASOS) located at the airport south of the city. The ASOS site provides wind speed and direction at a 10 m (32.5 feet) height (<https://www.ncdc.noaa.gov/data-access/land-based-station-data/land-based-datasets/automated-surface-observing-system-asos>). One-minute and 5-minute wind speed and direction are recorded.

"The AERMOD model currently cannot simulate dispersion under calm or missing wind conditions. To reduce the number of calms and missing winds in the surface data, archived 1-minute winds for the ASOS stations can be used to calculate hourly average wind speed and directions, which are used to supplement the standard archive of hourly observed winds processed in AERMET (EPA, 2010b)." (AERMINUTE users guide). This means that actual data for calm air is substituted with mean values greater than the calm air threshold. While AERMOD is the tool used by the EPA and WVDEP, its rigor, broad applicability and basis in science has been

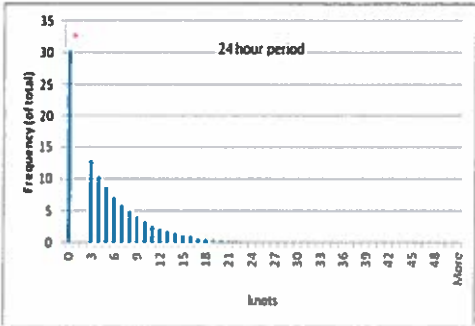
criticized in both the public scientific arena (Bad Science Underlies EPA's Air Pollution Program, 2018, Leven. Scientific American) and peer reviewed scientific articles (Barclay and Borrissova, 2013; Deligiorgi et al., 2009; Manins, 2001; Boadh et al., 2014; to list a small sampling).

The West Virginia Department of Environmental Protection maintains an air quality monitor within the city limits that measures particulate matter 2.5 microns and less (PM2.5) (<https://www.epa.gov/outdoor-air-quality-data/download-daily-data>). This site meets EPA Federally Recognized Methodology (FRM).

These public databases were used to analyze the wind behavior patterns as a proxy for wind behavior in Jefferson county West Virginia, a distance ranging from 10-25 miles generally west of Martinsburg.

From 2008 to 2017, approximately 30% of the 5-minute wind speed data were less than 3 knots or 3.45 mph) (Figure 1).

Figure 1. Frequency of wind speed distribution (%)Martinsburg airport (2008-2017) 5 minute data
Thirty percent of the events had wind speed <3 knots (3.45 mph)
Rising smoke drifts, wind vane is inactive. Small ripples appear on water surface.



The hours of calm air (< 3 knots or 3.45 mph) was tabulated for each day from 2008-2017. The average hours of calm air was 6.9 hours and ranged from less than 3 hours to over 10 hours. The average daily maximum of calm air was 15 hours and periods of calm air persisting for 15-20 hours occurred frequently (Figure 2).

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

...in both the public health and environmental science literatures (EPA's Air Pollution Program, 2013; Environmental Protection Agency, 2013). The scientific literature also indicates that...

The Virginia Department of Environmental Quality (DEQ) has been instrumental in the development of...

These findings suggest that there is a need for further research and policy development in this area...

...the following table provides a summary of the key findings and recommendations...

Table 1: Summary of Key Findings and Recommendations

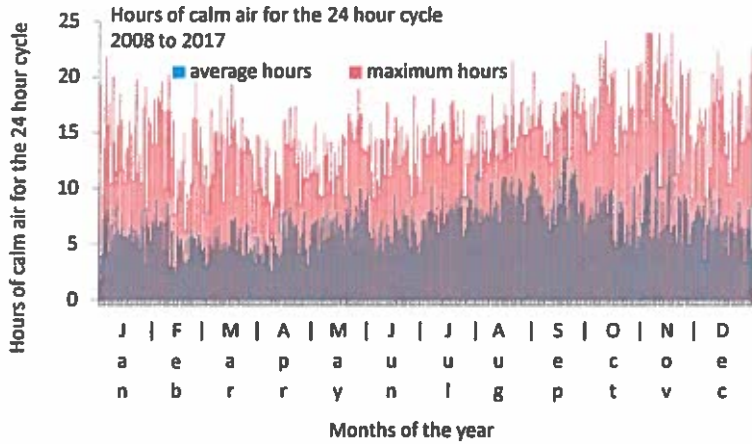
...the following table provides a summary of the key findings and recommendations...

Figure 2. Calm air events during the 24 hour cycle at Martinsburg, WV 2008-2017.

Calm Air Events During the 24 Hour Cycle

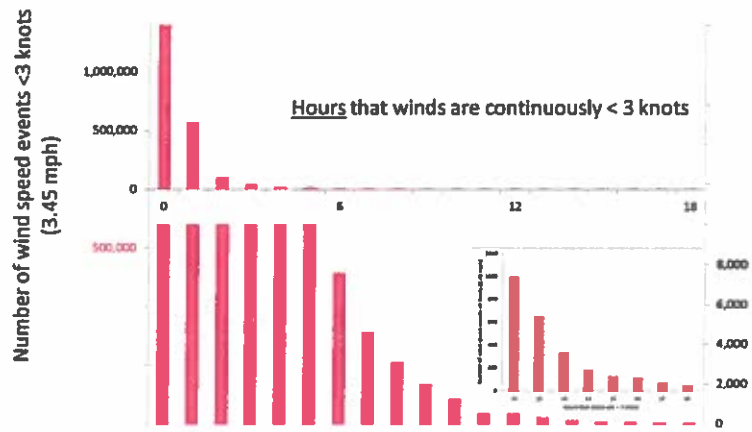
Considering 24 hour cycles, the average hours of calm air is 6.9 (blue bars). The average daily maximum hours of calm air is 15. Periods of calm air for 15-20 hours of the 24 hour day have occurred during the 2008-2017 time period (red bars).

Hours of calm air during the 24 hour period for each day from 2008 to 2017.



Hours that wind speeds are continually less than 3 knots (3.45 mph) range as high as 18 hours (Figure 3). Periods of continuous winds < 3.45 mph (3 knots) occurred for 10, 12, 14, 16 and 18 hours 1254, 653, 189, 120 and 57 times, respectively, in the 2012-2016 period . On average 73 times each year (~ 1 out every 5 days) these calm conditions will occur within Jefferson county .

Figure 3. Number of events whose wind speed is continuously <3 knots (3.45 mph) based on 2 minute average wind speed recorded every minute Martinsburg, WV from 2012-2016 (n=2,558,180)



The wind speed frequency of all the non-missing KMRB 1 minute data indicates that 29.99% of the data are <3 knots.

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Figure 1: Comparison of event timing for the 2017-2018 season.

Legend: ...



The following table summarizes the key data points from the graph:

Time Interval	Event Category 1	Event Category 2	Event Category 3
0-1	Low	Medium	High
1-2	Medium	High	Low
2-3	High	Low	Medium
3-4	Low	Medium	High
4-5	Medium	High	Low
5-6	High	Low	Medium
6-7	Low	Medium	High
7-8	Medium	High	Low
8-9	High	Low	Medium
9-10	Low	Medium	High
10-11	Medium	High	Low
11-12	High	Low	Medium



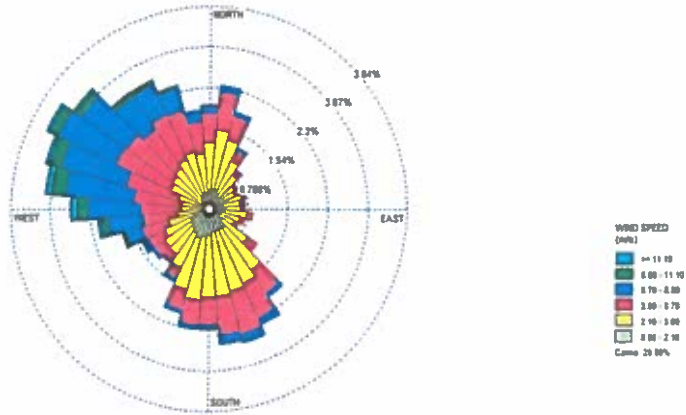
Prevailing wind direction is related to wind speed. When winds are greater than 5 mph, the winds generally come from the southwest to the northwest (Figure 4). When winds are less than 5 mph, winds generally come from the southeast to southwest.

Figure 4. The relationship of average wind direction and wind speed in Martinsburg, WV

Wind direction From the:	Wind speed > 5 mph % of total	Wind speed < 5 mph % of total
N	16.16%	17.35%
NE	5.23%	8.55%
E	5.26%	9.26%
SE	8.90%	12.28%
S	16.85%	22.64%
SW	8.49%	12.67%
W	20.53%	8.02%
NW	18.58%	9.23%

A wind 'rose' of these data integrate the speed and direction of winds (Figure 5). This diagram illustrates the lower wind speeds come predominantly from the southeast to southwest and higher wind speeds from the southwest to the northwest. Calm air conditions less than 3 knots (3.45 mph) occur 29.99% of the time.

Figure 5. Martinsburg, WV 2012-2016 wind speed and direction. (1 m/s = 2.2 mph).



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prevailing wind direction (based on wind speed). When wind speed is greater than 2 mph, the wind direction is generally down to the southwest to the northwest. When wind speed is less than 2 mph, wind direction is generally down from the southeast to southwest.

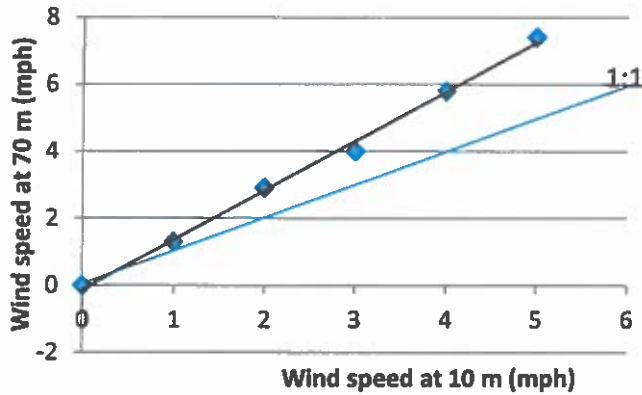
Typical The relationship between wind direction and wind speed is shown in the following graph.



The graph shows that wind direction is generally down to the southwest to the northwest for wind speeds greater than 2 mph, and generally down from the southeast to southwest for wind speeds less than 2 mph. This relationship is consistent with the prevailing wind direction (based on wind speed) described in the text above.

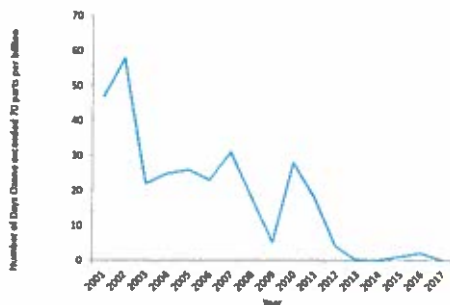
Wind speed generally increases with elevation above ground level. The ASOS weather station in Martinsburg, WV measures wind speed at 10m. The proposed smoke stack of Rockwool will be approximately 70 m tall. Wind speeds less than 3 mph increase at most 1 mph with the elevation to 70m (Figure 6).

Figure 6. Wind speed extrapolation from 10m to 70m with a boundary resistance value of 0.1 using the log law.



Ozone (O₃) is a product of combustion when volatile organic compounds (VOC's) react with nitrogen dioxides (NOx's) under high temperature (>80 F) and in the presence of UV radiation. Martinsburg, WV is a growing community whose population has increased 46% from 2001 to 2017. With an increase in population, there is an increase in automobile and truck vehicle miles in the area. So it would be expected that ozone levels would also increase with this population increase. But that has not occurred. Despite increased population (46%) and automobiles, excessive ozone levels have decreased over time. This is due to more cars with catalytic converters and improved diesel technology, primarily (Figure 7) which are the result of the Clean Air Act of 1970.

Figure 7. Number of days that ozone exceeded 70 ppb (EPA threshold) from May to September in Martinsburg, WV.



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Wind speed generally increases with elevation above ground level. The NOAA weather station at Mountain View, California, has recorded wind speed data for the period 1997-2011. The highest wind speed of 100 mph was recorded at an elevation of 1000 feet. Wind speed decreases as elevation increases. At 100 feet, wind speed is approximately 30 mph. Wind speed decreases as elevation increases. At 100 feet, wind speed is approximately 30 mph. Wind speed decreases as elevation increases. At 100 feet, wind speed is approximately 30 mph.

Figure 5. Wind speed and elevation data for Mountain View, California. The graph shows that wind speed increases with elevation.

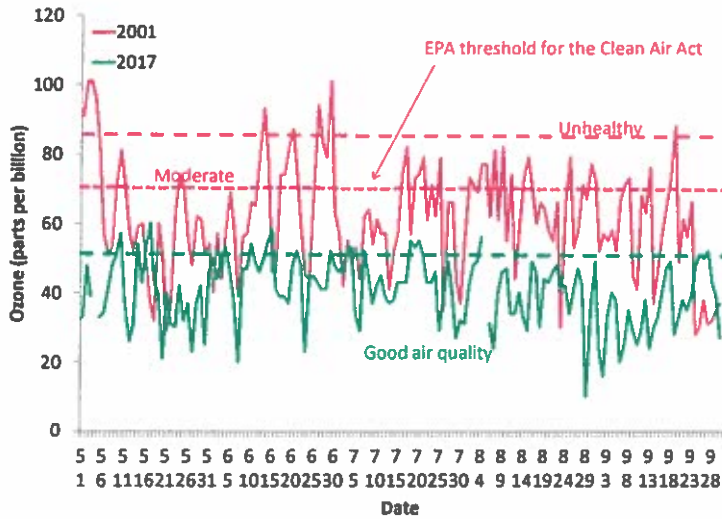


The graph shows that wind speed increases with elevation. The data points are approximately: (0, 15), (100, 30), (200, 40), (300, 50), (400, 60), (500, 70), (600, 80), (700, 90), (800, 100). The graph shows a clear upward trend where wind speed increases as elevation increases.

The graph shows that wind speed increases with elevation. The data points are approximately: (0, 15), (100, 30), (200, 40), (300, 50), (400, 60), (500, 70), (600, 80), (700, 90), (800, 100). The graph shows a clear upward trend where wind speed increases as elevation increases.

Overall ozone levels have declined from over 60 ppb (moderate levels of air pollution) to less than 50 ppb (good air quality) from 2001 to 2017 (Figure 8). Inc

Figure 8. Ozone levels in Martinsburg, WV in 2001 and 2017 from May to September.



Many agricultural crops are adversely affected by ozone. Soybean is particularly sensitive and is a major crop in the eastern panhandle of West Virginia (Figure 9). Further increases in ambient ozone will be detrimental to soybean production. Current levels of ozone (Figure 8) indicate that there is already chronic ozone damage on soybean yield with no visible symptoms.

The Rockwool air quality permit states that ozone will be produced as product of its combustion. Rockwool projects it will annually emit 239 tons of Nitrogen Dioxides (NOx's) and 472 tons of volatile organic compounds (VOC's) which will react with UV during the May to September temperature patterns to produce ozone. It is falsely implied that no harm will come from the generation of these pollutants. According to the USEPA, increasing ozone levels to the 'Moderate' level will also adversely affect sensitive adults and children working and playing outside.

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Figure 5.1.h shows the predicted annual average PM_{2.5} concentrations (in micrograms per cubic meter) for the year 2025. The concentrations are generally higher in the urban areas and lower in the rural areas. The concentrations are also higher in the winter months and lower in the summer months. The concentrations are also higher in the morning and lower in the afternoon. The concentrations are also higher in the north and lower in the south. The concentrations are also higher in the east and lower in the west. The concentrations are also higher in the north-east and lower in the south-west. The concentrations are also higher in the north-west and lower in the south-east. The concentrations are also higher in the north-east and lower in the south-west. The concentrations are also higher in the north-west and lower in the south-east.

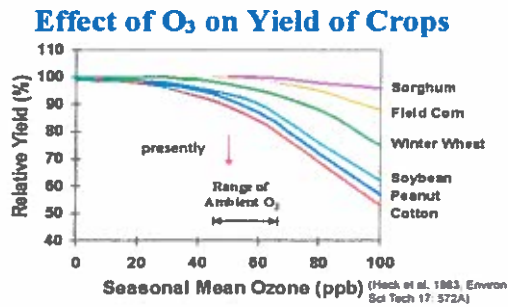


The predicted annual average PM_{2.5} concentrations for the year 2025 are shown in Figure 5.1.h. The concentrations are generally higher in the urban areas and lower in the rural areas. The concentrations are also higher in the winter months and lower in the summer months. The concentrations are also higher in the morning and lower in the afternoon. The concentrations are also higher in the north and lower in the south. The concentrations are also higher in the east and lower in the west. The concentrations are also higher in the north-east and lower in the south-west. The concentrations are also higher in the north-west and lower in the south-east. The concentrations are also higher in the north-east and lower in the south-west. The concentrations are also higher in the north-west and lower in the south-east.

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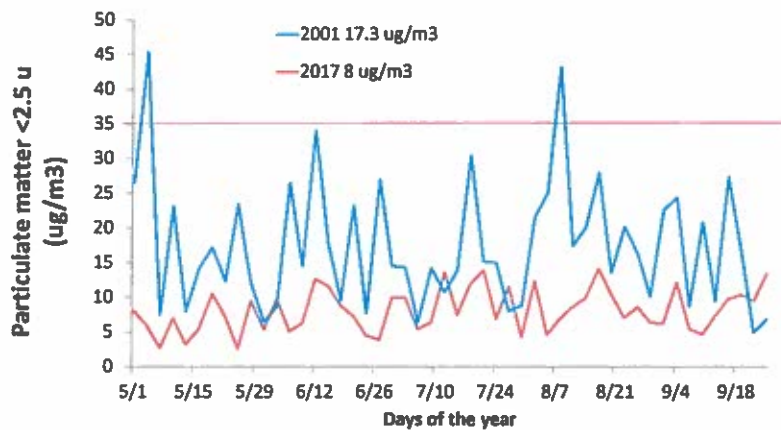
Ozone is heavier than air and will settle to the ground and accumulate in low lying areas.

Figure 9. Ozone effect on plants and agriculture



Particulate matter less than 2.5 microns (PM2.5) levels have decreased in the Martinsburg area from 2001 to 2017 (Figure 10) as a result of the Clean Air Act of 1970 and improved automobile and diesel technology.

Figure 10. Particulate matter <= 2.5 microns in Martinsburg, WV for 2001 and 2017.



Long-term exposure to PM2.5 is associated with an increase in the long-term risk of cardiopulmonary mortality by 6–13% per 10 µg/m3 of PM2.5

Heisterkamp et al. Long-term effects of traffic-related air pollution on mortality in a Dutch cohort (PM2.5-AM Study). Environmental Health Perspectives, 2016, 114(2):188–193.
5. Brunel D et al. Extended follow-up and interim analysis of the American Cancer Society lung cancer study: particulate air pollution and mortality. BMJ, 2010, 340:1191–1197.
10. Pope CA III et al. Long-term effects on cardiopulmonary mortality and long-term exposure to fine particulate air pollution. Journal of the American Medical Association, 2002, 287(26):3172–3180.

The Rockwool air quality permit states that PM2.5 will be produced as product of its combustion. Rockwool projects it will annually emit 134 tons of particulate matter less than 2.5 microns (PM2.5) and 154 tons of particulate matter less than 10 microns (PM10).

The Martinsburg area and the eastern panhandle now experience relatively high air quality with a trend to decreasing levels of ozone and PM2.5 (Figures 8 and 10) as a result of improved automobile and diesel technology resulting from the Clean Air Act of 1970.

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Special provisions for the ground and subsurface in various areas

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Calm air conditions limit the distribution and dispersal of emissions using smoke stack technology. Calm air conditions have minimal turbulence to keep emissions aloft and so allow emissions heavier than air to settle to the ground. The settling rate for emissions has been widely researched and verified. Periods of continuous winds < 3.45 mph (3 knots) occurred for 10, 12, 14, 16 and 18 hours 1254, 653, **189, 120 and 57** times, respectively, in the 2012-2016 period. **On average 73 times each year (~ 1 out every 5 days) these calm conditions will allow PM2.5, 5, 10 and ozone to settle within Jefferson county (Table 1).**

Table 1. Relationship between particle size and settling rate of PM 1 to PM10 and ozone using Stokes Law to calculate deposition times.

Particle size (microns)	Settling rate (cm/s)	Settling rate (ft/hr)	Time to deposit from 250' (hours)
1	0.06	7.1	35.2
2.5	0.15	17.7	14.1
5 and Ozone	0.3	35.4	7.1
10	0.6	70.8	3.5

The EPA recognizes that meteorological data selection influences model outputs and so dictates that worst-case conditions are adequately represented in the modeling outcomes. There was no worst-case consideration in the Roxul PSD application.

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Table 1.1: Estimated average annual per capita water use in gallons per day (gpd) for various uses. The table shows that residential use is the largest category, followed by commercial and industrial. The total per capita water use is estimated to be 100 gpd.

Table 1.2: Estimated average annual per capita water use in gallons per day (gpd) for various uses. The table shows that residential use is the largest category, followed by commercial and industrial. The total per capita water use is estimated to be 100 gpd.

Use Category	Estimated Annual Per Capita Water Use (gpd)
Residential	60
Commercial	25
Industrial	15
Total	100

The City of... is committed to providing high-quality water services to its residents and businesses. This commitment is reflected in the City's investment in water infrastructure and its ongoing efforts to improve water efficiency and conservation.




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MAR 08 2013

MEMORANDUM

SUBJECT: Use of ASOS meteorological data in AERMOD dispersion modeling

FROM: Tyler Fox, Group Leader 
Air Quality Modeling Group, C439-01

TO: Regional Modeling Contacts

1. Introduction

When performing dispersion modeling for a project, the selection of meteorological data can play a major role in the outcome of the modeling results. The *Guideline on Air Quality Models* ("Guideline"), published as Appendix W to 40 CFR Part 51, (U.S. EPA, 2005), states in Section 8.3.1.1 that the user should acquire sufficient meteorological data "to ensure that worst-case conditions are adequately represented in the model results." For regulatory modeling applications such as New Source Review (NSR), Prevention of Significant Deterioration (PSD), and State Implementation Plans (SIPs), the *Guideline* recommends that when using National Weather Service (NWS)¹ meteorological data, five consecutive years of the most recent, readily available data should be used (Section 8.3.1.2). Alternatively, the *Guideline* provides that at least 1 year, up to five years, of site specific meteorological data may be used. Regardless of whether NWS or site-specific meteorological data are used, the *Guideline* emphasizes that the data should be adequately representative of the study area (Section 8.3.1.2.a).

The high frequency of calm periods in the meteorological record presents a worst-case scenario for the area because the 210 ft tall smoke stack of Rockwool will not dilute and disperse its emission when there are calm winds.

40 CFR Part 51 section 7.2.1.2 Complex Winds

- i. Inversion breakup fumigation. Inversion breakup fumigation occurs when a plume (or multiple plumes) is emitted into a stable layer of air and that layer is subsequently mixed to the ground through convective transfer of heat from the surface or because of advection to less stable surroundings. Fumigation may cause excessively high concentrations, but is usually rather shortlived at a given receptor. **There are no recommended refined techniques to model this phenomenon.** There are, however, screening procedures that may be used to

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approximate the concentrations. Considerable care should be exercised in using the results obtained from the screening techniques.

- ii. iii. Stagnation. Stagnation conditions are characterized by calm or very low wind speeds, and variable wind directions. These stagnant meteorological conditions may persist for several hours to several days. During stagnation conditions, the dispersion of air pollutants, especially those from low-level emissions sources, tends to be minimized, potentially leading to relatively high ground-level concentrations. If point sources are of interest, users should note the guidance provided in paragraph (a) of this subsection. Selection of the appropriate model for applications where stagnation is of concern should be determined in consultation with the appropriate reviewing authority (paragraph 3.0(b)).

The US National Climatic Data Center (NCDC) has monitored monthly air stagnation days for the United States since 1973 to indicate the temporal buildup of ozone in the lower atmosphere (<http://www.ncdc.noaa.gov/societal-impacts/air-stagnation/>, last access: 30 May 2018). A given day is considered stagnant when the 10 m wind speed is less than 3.2 m s⁻¹ (i.e., near-surface wind is insufficient to dilute air pollutants), 500 hPa wind speed less than 13 m s⁻¹ (i.e., lingering anti-cyclones, indicating weak vertical mixing), and no precipitation occurs (i.e., no rain to wash out the pollutants) (Korshover, 1967; Korshover and Angell, 1982; Wang and Angell, 1999; Leung and Gustafson, 2005; Horton et al., 2014). Q. Huang et al.: *Climatological study of the Boundary-layer air Stagnation Index for China Atmos. Chem. Phys.*, 18, 7573–7593, 2018 3.2 m/s = 7.2 mph

There is no mention of modeling results for the calm air conditions at the KMRB site in the Roxul PSD or worst case scenarios.

Key deficiencies of the Roxul PSD permit related to meteorology:

- 1) *The use of an out-dated and error-prone emission dispersion model(AERMOD) and total reliance on the modeled output to project emission dispersion in Jefferson county*
- 2) *Calm air conditions and the worst-case scenario of local inversions were not considered in the Roxul PSD modeling of emission dispersion contrary to EPA direction.*
- 3) *Calm air conditions and local inversions of sufficient duration to allow settling of PM 2.5, 5 and 10 micron occur approximately 20% of the year on average i.e. one every 5 days.*
- 4) *Prolonged inversions concentrate PM's at or near the site of emission.*
- 5) *The proximity of North Jefferson Elementary School, citizens and workplaces to the Rockwool plant poses a critical health threat when these prolonged inversions occur.*

The executive summary of the recent Rockwool Jefferson County, WV Ambient Air Quality Monitoring Report January 1, 2020 – March 31, 2020 19 May 2020 Project No.: 0500750 included the following statement:

Of the 16 “Moderate” category days registered at NJES, 3 days had AQI values greater than 75. Those 3 days, January 23, January 24, and February 1 were influenced by regional accumulation of PM_{2.5} as shown in images retrieved from US EPA’s AirNow archive (see Appendix D). Each of the three days are characterized by having calm winds recorded for most of the hours of the day.

Figures 8-11 illustrate calm conditions occurring 26.88%, 19.4%, 17.47% for January through March, respectively with a mean calm percentage of 21.29% for January to March.

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It is undeniable that the combination of Jefferson county's high frequency of calm air conditions (Figures 1, 2 Table 3) with the pollution from the Rockwool plant will jeopardize the health and well being of its citizens.

I urge the city of Ranson, WV to reject the conversion of Jefferson Orchards zoning to 'heavy industrial' for the above stated reasons and many others that qualified citizens have brought to your attention. The council wasn't fully informed the first time it rezoned the Jefferson Orchard site and they are not fully informed this time. If the council votes to approve the rezoning you are not only approving Rockwool but are facilitating the state's desire for a 1000 acre industrial park; this destruction of our valley will be your legacy and if the council is not fully aware of the implications of their vote they should vote no.

David Michael Glenn PhD
Retired Plant Physiologist/Director
USDA-ARS-Appalachian Fruit Research Station
Kearneysville, WV
304-876-3505
Chester4@comcast.net

References:

Barclay, J.J. and Borissova, M., 2013. Potential problems using AERMOD to implement current odour regulations for WWTPs. *Water Science and Technology*.

Deligiorgi, D., Philippopoulos, K., Karvounis, G. and Tzanakou, M., 2009. Identification of pollution dispersion patterns in complex terrain using AERMOD modelling system. *International Journal of Energy and Environment*, 3(3), pp.143-150.

Manins, P.C., 2001. The Gaussian plume model-strengths and weaknesses. *Clean Air and Environmental Quality*, 35(3), p.30.

Boadh, R., Satyanarayana, A.N.V. and Krishna, S.R., 2014. Assessment of dispersion of oxide of nitrogen using AERMOD model over a tropical industrial region. *International Journal of Computer Applications*, 90(11).

EPA, 2010b: Addendum - User's Guide for the AERMOD Meteorological Preprocessor (AERMET). EPA-454/B-03-002. U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.

Rachel Leven. 2018. Bad Science Underlies EPA's Air Pollution Program
Scientific American. Jan 29, 2018

<https://www.scientificamerican.com/article/bad-science-underlies-epa-rsquo-s-air-pollution-program/>

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Stacey Pfaltzgraff

From: Mark <vthokiebc@yahoo.com>
Sent: Tuesday, June 16, 2020 6:58 AM
To: Stacey Pfaltzgraff
Subject: Ordinance 2017-302

CAUTION: External Email

To Whom it may concern,

I am a tax paying citizen living in the city of Ranson. I urge you to vote against the proposed re-zoning ordinance that will protect the Rockwool project. The entire Rockwool project is a threat to the Eastern Panhandle's citizens and environment. I find it rather disturbing how the this project even got started. Everyone involved with illegally processing and issuing permits for Rockwool should be fired and brought up on charges for violating state laws and regulations. I don't understand how all of this was allowed to proceed to the point we are at right now. The elimination of the Northport Station Project in place of Rockwool has deprived the county of the Master Planned Transit Oriented Development project which would have greatly benefited the Eastern Panhandle. The tax breaks given to Rockwool are ridiculous. The amount of increased truck traffic is a serious threat to the community. Allowing Rockwool to continue is a total disservice to the Eastern Panhandle.

Sincerely,
 Mark Gorgas
 52 Velveteen Court
 Ranson, WV 25438

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Erik Granrud <jetpylet@protonmail.com>
Sent: Tuesday, June 16, 2020 6:24 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--

Erik Granrud
jetpylet@protonmail.com
Charles Town 25414

Stacey Pfaltzgraff

From: Karen Gray <karen_gray@apple.com>
Sent: Monday, June 15, 2020 5:15 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Dear Sir/Madams on the board,

I respectfully request that you vote no on #2017-302. The health and safety of -all area residents- regardless of border should be valued.

Air emissions, possibility of ground and surface water contamination, and their effect on our interwoven economies threaten the health, safety and welfare of not just Jefferson County but the greater region, including Loudoun and the greater Northern Virginia area.

This zoning would provide for industry that produces large amounts of air emissions. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. Northern Virginia is directly downwind from these emissions. Much of the gaseous, fine particulate, and hazardous emissions can reach Northern Virginia. Further affecting the outdoor air quality of the adjacent portion of Virginia and the ability of these areas to achieve and maintain National Ambient Air Quality Standards (NAAQS) attainment. This will affect agriculture and outdoor leisure and recreation.

For example, Loudoun County has been in nonattainment for the NAAQS 8-hour Ozone standard for the past two years. VOC and NO_x react after they have been emitted to produce ground level ozone. The industry that this rezoning would provide for would produce large amounts of these emissions. This would make it even harder as Loudoun County tries to achieve attainment. As time goes on and the scientific research advances our knowledge and understanding of the extent to which gaseous, particulate and hazardous emissions affect human health the NAAQS standards are likely to be reduced. The effects on air emission from this rezoning will make it only harder for Loudoun and Northern Virginia to meet these standards.

In addition to the concerns about the air, the possible ground and surface water contamination is very concerning to Loudoun and Virginia residents. The site is known to have ground water that is vulnerable to contamination due to the karst hydrogeology. A USGS study demonstrated that the ground water adjacent to the site to be rezoned communicates readily with surface water tributaries of the Potomac River. In addition to direct infiltration where water moves directly from the surface to groundwater via porous limestone bedrock, karst is known to have severe ground instability problems. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater. This makes the aquifer vulnerability in karst areas very high, and contamination with industrial activity such as that provided for by this rezoning too likely.

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Loudoun sources its drinking water from the Potomac River, downstream of many West Virginia tributaries that carry water from the epikarst and groundwater aquifer at the site to be rezoned. Loudoun has recently completed the new Trap Rock Water Treatment facility, which draws water from the Potomac River. Loudoun currently provides 40 million gallons and projects to provide 90 million gallons of drinking water a day to customers by 2040 (https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fLoudounwater.org&c=E,1,5_Ev1jwz905EiABG2uf48ajO1Rxjww1lHrkrFjL2jOKafFendoJnHzJW7mxeHp5miUVZ9vaLnx_6PNj6cd1_ub1ewuOjt15S3S2rZPvCw,,&typo=1). Therefore, the viability of the Potomac River is a high priority for Virginia residents.

Loudoun and Northern Virginia is one of the fastest growing communities in the country and provides a lot to Jefferson County in their symbiotic relationship. Virginia residents support and enjoy Jefferson County through tourism, as our residents enjoy the natural and historical resources of your county. Virginia residents and businesses support the equine industry in a multitude of ways from providing wagering fans at the races to the Virginia Breeders Association Virginia Certified incentive programs and a strong market for retired racehorses. According to an economic impact study from WVU, at least 40% of Jefferson County residents travel outside of West Virginia for work, a good percentage of those travel to northern Virginia. This rezoning would allow for industry that would negatively affect the economy of both places and this relationship and the benefits for our residents gleaned from it.

This zoning change will provide for industry that will negatively effect the health safety and welfare of the Loudon and Northern Virginia community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,
Karen Grays

--
Karen Gray
karen_gray@apple.com
Sterling 20165

Stacey Pfaltzgraff

From: Samuel Greene <08greene@cua.edu>
Sent: Tuesday, June 16, 2020 11:26 AM
To: Stacey Pfaltzgraff
Subject: Public Comment for Hearing on 16 June

CAUTION: External Email

Ms. Pfaltzgraff,

Please find my public comment for today's hearing below:

Dear Mayor Pierson and members of the City Council:

As a property owner in Ranson, I am writing to express my strong opposition to the rezoning of Jefferson Orchards without the holding of a properly noticed election, as allowed by the WV Code. The Rockwool project would result in a fundamental change to the character of the city and county. Given its extraordinary controversy, reenacting the ordinance without a public vote would deprive Ranson residents of a democratic opportunity to choose the future direction of their community. Particularly given that the hearing is occurring because of faults in the public notice period, enacting this ordinance without a public vote would be to deprive Ranson's citizens of their democratic voice. Indeed, this is precisely the proper occasion to hold an election to resolve a zoning controversy.

Sincerely,

Samuel Greene

--

Samuel R. Greene, Ph.D.

+1 541-513-4197 (Cell)

08greene@cua.edu (Email)

Stacey Pfaltzgraff

From: Nancy Gregory <nsgorgioso@gmail.com>
Sent: Monday, June 15, 2020 10:01 AM
To: Stacey Pfaltzgraff
Subject: Zoning of Jefferson Orchards- public comment

CAUTION: External Email

Public Comment

DO NOT ACCEPT SPECIAL DISTRICT INDUSTRIAL ZONING

In 2015, the site where RW is building was planned for a new mixed use, walkable community with residences, green space, commercial and light industry, retail, a school and a MARC train station—and was zoned as such using funding from President Obama's Sustainable Communities initiative.

After secretive negotiations with Rockwool, in 2017 the municipal government of Ranson quickly rezoned the site to the exclusive use of heavy industry and to accommodate Rockwool's 213 foot tall smokestacks. This rezoning without the knowledge of the citizens was unethical, dishonest, and has been proven in court to have been done incorrectly according to state law.

What happened? Ranson Mayor, David Hamill, who had a vision and the will to make this ideal community happen, died in 2017. Ranson's next Mayor, Duke Pierson, rejected this plan that would have created a desirable place to live, work, play, attend school, and connect to other parts of Jefferson County and connect to major metropolitan areas. Instead, Mayor Pierson and other officials doomed that site for heavy and polluting industry starting with RW. Under the surface, a lot of decisions were made without knowledge of the citizens or even some Jefferson County officials.

Communication is the process of passing information and **understanding** from one person or organization to another. This did not happen. Due diligence to the community was not accomplished by Rockwool or the officials who are supposed to represent the people.

Rockwool does not belong in Jefferson County....never has and never will. The majority of Jefferson County citizens oppose heavy industry like Rockwool. Government should be by the people and for the people, not by the officials for the corporations. This is your chance to go back in time before you tried to rezone Jefferson Orchards and stop this nightmare project. Right the wrong that was done. If you don't, know that the citizens will fight Rockwool and other heavy industry and its government allies for as long as it takes, generation after generation, until the citizens take back Jefferson County.

DO NOT ACCEPT SPECIAL DISTRICT INDUSTRIAL ZONING

Nancy Gregory
 Resident Jefferson County, WV

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Christopher Griggs <cagmail@icloud.com>
Sent: Monday, June 15, 2020 5:19 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Many of us in Loudoun have income based on tourism and agriculture. Building a factory that produces noxious pollutants on the doorstep of your neighbors with winds that will predominantly sweep the stench liver the border and into our homes and affect our businesses that rely on tourism is criminal. A factory has no place in our area.

I respectfully request that you vote no on #2017-302. The air emissions, possibility of ground and surface water contamination, and their effect on our interwoven economies threaten the health, safety and welfare of not just Jefferson County but the greater region, including Loudoun and the greater Northern Virginia area.

This zoning would provide for industry that produces large amounts of air emissions. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. Northern Virginia is directly downwind from these emissions. Much of the gaseous, fine particulate, and hazardous emissions can reach Northern Virginia. Further affecting the outdoor air quality of the adjacent portion of Virginia and the ability of these areas to achieve and maintain National Ambient Air Quality Standers (NAAQS) attainment. This will affect agriculture and outdoor leisure and recreation.

For example, Loudoun County has been in nonattainment for the NAAQS 8-hour Ozone standard for the past two years. VOC and NO_x react after they have been emitted to produce ground level ozone. The industry that this rezoning would provide for would produce large amounts of these emissions. This would make it even harder as Loudoun County tries to achieve attainment. As time goes on and the scientific research advances our knowledge and understanding of the extent to which gaseous, particulate and hazardous emissions affect human health the NAAQS standards are likely to be reduced. The effects on air emission from this rezoning will make it only harder for Loudoun and Northern Virginia to meet these standards.

In addition to the concerns about the air, the possible ground and surface water contamination is very concerning to Loudoun and Virginia residents. The site is known to have ground water that is vulnerable to contamination due to the karst hydrogeology. A USGS study demonstrated that the ground water adjacent to the site to be rezoned communicates readily with surface water tributaries of the Potomac River. In addition to direct infiltration where water moves directly from the surface to groundwater via porous limestone bedrock, karst is known to have severe ground instability problems. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater. This makes the aquifer vulnerability in karst areas very high, and contamination with industrial activity such as that provided for by this rezoning too likely.

Loudoun sources its drinking water from the Potomac River, downstream of many West Virginia tributaries that carry water from the epikarst and groundwater aquifer at the site to be rezoned. Loudoun has recently completed the new

Trap Rock Water Treatment facility, which draws water from the Potomac River. Loudoun currently provides 40 million gallons and projects to provide 90 million gallons of drinking water a day to customers by 2040 (https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fLoudounwater.org&c=E,1,XhksQ1tunm-Jkc7KhRI-InHqvyXB19-9ZSIWTBGG-SlgnfnuLTzVRiorupzEof0PiGF3KZspQFS9KkzLrgR9MuHjryWL0IYYOpfxJcGR-Uh086fQlcpbzy_2MA,,&typo=1). Therefore, the viability of the Potomac River is a high priority for Virginia residents.

Loudoun and Northern Virginia is one of the fastest growing communities in the country and provides a lot to Jefferson County in their symbiotic relationship. Virginia residents support and enjoy Jefferson County through tourism, as our residents enjoy the natural and historical resources of your county. Virginia residents and businesses support the equine industry in a multitude of ways from providing wagering fans at the races to the Virginia Breeders Association Virginia Certified incentive programs and a strong market for retired racehorses. According to an economic impact study from WVU, at least 40% of Jefferson County residents travel outside of West Virginia for work, a good percentage of those travel to northern Virginia. This rezoning would allow for industry that would negatively affect the economy of both places and this relationship and the benefits for our residents gleaned from it.

This zoning change will provide for industry that will negatively effect the health safety and welfare of the Loudon and Northern Virginia community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
 Christopher Griggs
 cagmail@icloud.com
 Hillsboro 20132

Stacey Pfaltzgraff

From: Amy Hartman <amywv@icloud.com>
Sent: Sunday, June 7, 2020 12:01 PM
To: Stacey Pfaltzgraff
Subject: Public Zoning Public Comment

CAUTION: External Email

I feel if this process would had be done correctly to begin with Rockwool wouldn't be here today. I also feel that the public comment and hearing being done now to rezone Jefferson Orchard for Rockwool is just going to be formality. That the public will be ignored and this zoning will go through regardless what the people say or want. I hope I'm wrong. If this zoning goes through it will prove that Ranson government is corrupt. There is not one good reason for Rockwool to be here in Historical tourism Farming and Outdoor Recreation Jefferson Country. We don't need Rockwool kind of jobs. We don't need our water supply ruin because Rockwool is being built on ground zero for Karast Land. It's the time of change, time to make a better tomorrow. Do the right thing this time listen to the people and what they want. You work for them no one else. Whatever Rockwool does to us when they have leave we will survive. Stop the corruption now.

Amy Hartman
Amywv@icloud.com
402 Crestview Dr
Harpers Ferry, WV 25425

PS. I moved to beautiful Historical Tourism Jefferson County 16 years ago. After coming to my granddad cabin here my whole life.
Not to live 7 miles down wind of Rockwool I will be leaving with all the others if Rockwool opens.
Sent from my iPhone

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

06/15/20

Dear Mayor and Ranson City Council,

It is now some fifty years that Margaret and Dr. John Washington invited my wife and me to Jefferson County and Harewood for a visit. As a historian, a former trustee of the Thomas Jefferson Memorial Foundation and of the National Trust for Historic Preservation (chartered by Congress) I and my entire family were captivated by both the natural and cultivated landscape of this unique and respected environment that has now been settled nearly 300 years.

Not long after the visit to the Washingtons we found the dilapidated farm and house still called Hazelfield given by General Adam Stephen to his daughter Anne as a dowry in 1780 when she married Alexander Spotswood Dandridge, cousin of Martha Washington. General Stephen is well known in these parts for his exuberant exploits in the French and Indian War as a general in the American Revolution as well as the founder of Martinsburg.

After more than forty years Hazelfield has been restored with most of its original materials and craftsmanship in tact, and placed on the National Register of Historic Places in 1975. It is also the subject of measured drawings by Historic American Building Survey for the files and online records of

Hazelfield, borders on nearly a mile of Jefferson Orchard now leased by Rockwool, where the heavy industry zoning was changed without notification to us or with any recognition or concern of its official historical status at the state or Federal level placing the manufacturing facility and its towering smokestacks and 24 - hour lights less than a mile from the house built in 1815.

Even today I am still finding historical references in the roads, towns, place names and houses within the precincts of both Jefferson and Berkeley Counties that is, in my judgment, one of the most resonating landscapes of American history in the Valley of Virginia and beyond. Like all of us we pay our taxes in the court house where John Brown was tried and convicted. Up the street from the post office F. Scott Fitzgerald the author of "The Great Gatsby" spent weekends with his Princeton classmate the poet John Peale Bishop. J.F.K. who campaigned in the streets of Charles Town claimed that his 1960 primary victory in West Virginia sealed his national nomination as president. Over at Shepherdstown originally called Mecklenburg named for George III's new wife Queen Charlotte who came from the German town, you can quaff a brew at the pub of the same name.

While I know that everyone has been briefed on the chemical and hazardous pollutants that will unquestionably be introduced by the Rockwool plant , I would call attention to the long term damage and degradation to our shared heritage of Jefferson County that embraces a major period of the settled

history of our country. It is this 'clear and present' threat to the very character of the County that should be thoughtfully weighed along with the other dangers posed by heavy industry. Corporate welfare in the form of corporate tax cuts at the expense of education and the environment is not what the majority want. As a Danish corporation this heavy handed indifference to Danish history would never be tolerated in the home country.

The 150 jobs that Rockwool promises to create cannot justify the untold amount of economic loss to the county from the negative impact on its historical resources, the surrounding farmland, horse breeding industry and tourism that Rockwool will cause. The environmental toll will be irreversible.

Respectfully, I write this letter to you to urge you to Vote NO to #2017-302

"An Ordinance Amending and Re-enacting and Chapt. 19A, Article 1; Jefferson Orchards Reallocating Transect Districts 8, tax Map 12, parcel 1" the official zoning map of the City of Ranson pursuant to Ranson Municipal Code Articles 19-20 and to oppose the insidious depredations that will follow the misguided County plan to introduce heavy industry into this beautiful but fragile valley. Conservation of history should rank with the other environmental challenges that threaten our very survival. Make no mistake, Rockwool is only the "camel's nose under the tent."

William Howard Adams
Hazelfield
1633 Warm Springs Road
Shenandoah Jct, W.V. 25442
304 596 1157

Stacey Pfaltzgraff

From: Matthew Hollis <mhollis13@mac.com>
Sent: Tuesday, June 16, 2020 10:31 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that will significantly harm the municipalities within Jefferson County and beyond effecting the health, welfare, and safety of our community. Harpers Ferry is a national treasure with the natural and historic resources tours flock to see each year and one of the communities that will be negatively impacted by this zoning change.

According to a 2019 study by the West Virginia Tourism Office, Jefferson County generated an average of \$178 million per year in tourism-derived revenue for state and local governments over the last 10 years, more than any other county in West Virginia by at least double. Tourism benefits the businesses and economy of Ranson and Jefferson County producing \$213.7 million in individual earning, 7040 jobs, and \$842.6 million in direct spending here in 2018. We would need 40 Project Shuttles to replace the individual earnings and 59 Rockwools to replace the jobs provided by the tourism industry in Jefferson County. It is important to note that most of the money generated by tourism in Jefferson County comes from neighboring states. In this way, it is like an export: not simply recycling money, but bringing money into the state increasing its wealth. Much of the economy in Harpers Ferry is based on this tourism industry. A threat to this industry poses a threat to the economy and welfare of our community.

One of the important drivers for tourism in Harpers Ferry is the Appalachian Trail. According to the Appalachian Trail Conservancy (ATC), Harpers Ferry is the psychologic midpoint of the Trail, and hikers often plan extended stays in Jefferson County with an obvious positive impact. The ATC reports that the smokestacks and associated lights will be visible in the viewshed of 15 vistas on the Appalachian Trail (AT). Studies have shown that quality of vistas and human impact on the environment are not only noticed by visitors, but effect their experience. Another study published in the Journal of Applied Recreation Research, found that points of interests and views drew visitors' attention and had a significant impact on their perception of the trail. It was also found that particularly beautiful vistas helped visitors overlook elements that usually have a negative effect on trail experience like increased trail traffic. A 2009 study in Leisure Sciences revealed that scenic value was a perceptual theme of Appalachian Trail visitors, and that things as simple as dead trees visible in a vista can have a negative impact on visitors' overall perception. Imagine the effect the smokestacks will have from the 15 vistas from which they will be visible. The introduction of industrial activity made possible by the proposed rezoning in Ranson would have a negative effect on the scenic views of beautiful landscapes from the Appalachian Trail in Jefferson County.

The smokestacks are not all visitors will be able to see — the air pollution will create haze. The effect of regional haze on tourists was explored in a review article published in the Atmospheric Environment titled "Impaired visibility: the air pollution people see." A key takeaway on the negative affect of haze on vacationing tourists was summarized as follows:

"Vacations offer an escape from the routine and stress of our daily lives. Vacation destinations are often chosen based on their scenery; vacations are spent gazing at monuments, mountains, clouds, and oceans. Good visibility allows clear observation of distant features and appreciation of the inherent beauty of these scenes...Air pollution, which is often present in both our cities and parks, interferes with these attributes and can ruin the views vacationers travel to enjoy."

People seek bucolic, unspoiled areas to escape the stresses of urban areas. A 2004 study in Environment and Behavior found perceived pollution causes stress while viewing natural scenes has both psychological and physiological benefits, and a 2007 study confirmed these benefits. Two other studies found that people are emotionally affected by poor visibility, and tourists are disappointed when views are obscured by haze.

The combination of smokestacks and haze will mar the viewshed and will not only reduce the positive effects of a scenic landscape but also leave tourists disappointed and dissatisfied with their choice of destination. With these effects the welfare of the Harpers Ferry community would undoubtedly be endangered by the industry that this zoning change will provide for.

Multiple studies by doctors Kozar, Doctor, and Doctor have demonstrated that the land at this site to be rezoned is Karst with the highest likelihood of sinkhole development in the county, and that the groundwater aquifer there is incredibly sensitive to contamination from surface water. Further, this site is on an upland plain with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. In this area contamination in surface water communicates easily to the water in the epikarst via diffuse and point infiltration, and the springs at the margins of the upland area are directly affected by the water quality throughout the aquifer. According to Jefferson Orchards Voluntary Remediation Plan with the WVDEP, the groundwater at the site is approximately 60 feet below the ground, and the tests performed by the USGS have shown that groundwater from just adjacent to this site emerged in the headwaters of both the Elk's Run and Rattlesnake Run. This is critically important for Harpers Ferry because the Elk's Run headwaters is a spring about three miles southeast of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River. The headwaters of Rattlesnake Run is a spring about 3.5 miles from the site and is also a tributary of the Potomac River. The Potomac River is the back up water source for Harpers Ferry. This means that the activity at the site will have a critical influence on the drinking water of Harpers Ferry. In this was the industry permitted by this change in zoning would undoubtedly endanger the health and safety of the community in Harpers Ferry.

The untoward health effects and individual economic consequences from the pollution emissions of the industry this rezoning will allow that will be born out over the length of people's lives and that of their decedents for at least three generations is an egregious example of environmental injustice that should not be tolerated. This zoning change may be in one of the poorest sections of the county, but the effects will be felt in every part of Ranson and the county.

The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." The industry that this rezoning will allow will jeopardize the health, safety and welfare of Ranson, Harpers Ferry and the whole county. Please vote no on the ordinance #2017-302.

Sincerely,

Matthew Hollis
mhollis13@mac.com
Harper's Ferry 25425

Stacey Pfaltzgraff

From: James Holmberg <jimjam3303@aol.com>
Sent: Monday, June 15, 2020 6:00 PM
To: Stacey Pfaltzgraff
Subject: Rockwool and more

CAUTION: External Email

If the approval/rejection of rezoning for Rockwool by Ranson were put to a vote in Jefferson County, most every citizen would vote against it. Not only did Ranson not do it correctly but they're also approving high density developments that will turn our county into a county like Frederick County, Maryland. Terrible traffic, an overabundance of commercial establishments and a loss of the scenic county we have. Seems like Ranson wants to turn us into Maryland. God Forbid!

Jim Holmberg
194 Karen Lane
Shenandoah Junction,

WV 25442

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Al Van Huyck <al.vanhuyck@gmail.com>
Sent: Monday, June 15, 2020 11:30 AM
To: Against Rockwool
Cc: Stacey Pfaltzgraff
Subject: Re: Rockwool Public Hearing

CAUTION: External Email

The Executive Committee of the Loudoun County Preservation and Conservation Coalition endorses the content of the Save Our Loudoun presentation submitted on June 14, 2020 by Ms. Sutphin (attached below). Our organization consists of 51 Loudoun non-profit, non-partisan organizations dedicated to the preservation, enhancement, and celebration of Loudoun's heritage and environment.

We recognize that the existence of a fully functioning Rockwool Plant in Ranson, WV is a major threat to Loudoun County.

The documented research on the threat to Loudoun from air and water pollution is of such magnitude that it potentially could have major negative consequences on our Western Loudoun rural economy of tourism, agriculture, and the equine industry.

The governing body of Ranson now has a second chance to deny the zoning that permits the Rockwool Plant to locate in your midst. The full accounting for the huge negative impact it will have on your community and surrounding neighbors is now fully available to you as justification for taking corrective action. To knowingly ignore the evidence and to again permit this industrial zoning to stand is to directly impact your community and the destruction of their quality of life while allowing the polluting effects to drift across a much larger region which stands hopeless to protect themselves.

Please take advantage of this opportunity to block the Rockwool Plant.

Alfred P. Van Huyck (phone 703-624-5536)

Chair of the Executive Committee of the Loudoun County Preservation and Conservation Coalition

On Sun, Jun 14, 2020 at 8:55 PM Against Rockwool <lar.volunteer.coordinator@gmail.com> wrote:

To Whom It May Concern:

My name is Michelle Sutphin and I am a resident of Loudoun County, VA. I have been a part of a group called Loudoun Against Rockwool (LAR) since August of 2018. Our group has grown very concerned about the potential negative impacts on Loudoun County with the building of the Rockwool factory. Between 2018 and 2019, the LAR group spoke at every single town council in Loudoun county and successfully persuaded every town to issue a written statement formally opposing the plant. The attached briefing was given to Lovettsville on January 24, 2019 which was our last town to adopt a statement and was reported in the following linked article: <https://loudounnow.com/2019/02/01/lovettsville-becomes-final-loudoun-town-to-oppose-rockwool/>

I am formally submitting this briefing to you as supplemental evidence regarding the adverse impact upon your neighbors in Loudoun county and we highly encourage your opposition to this matter.

Thank you,
Michelle J. Sutphin
Phone: 240-595-1212

Stacey Pfaltzgraff

From: Janes, Elizabeth (ENRD) <Elizabeth.Janes@usdoj.gov>
Sent: Monday, June 8, 2020 10:59 AM
To: Stacey Pfaltzgraff
Subject: Re Rockwool Permit and Upcoming Meeting

CAUTION: External Email

After more than three years of the public making it abundantly clear Ranson made an awful mistake issuing this permit to Rockwool, enough should be enough. Those who live in the Panhandle area are devoted to maintaining a unique and precious way of life, and have the resources and resilience to succeed.

Many people such as myself want to move to Shepherdstown from Northern Virginia. If Rockwool is allowed to stay, the economic impact will be profound, and West Virginia will indeed suffer. The "jewel" that is the Panhandle will be destroyed.

I have worked in the environmental field for 30 years. This plant has no place in West Virginia, or the United States in general. Coal-fired plants are obsolete and we all know too much to allow this to continue.

Sincerely,

Elizabeth R. Janes
Program Specialist
USDOJ/ENRD/ECS
(202) 305-0378

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

ATTENTION JEFFERSON COUNTY RESIDENTS

NOTICE OF PUBLIC HEARING

City of Ranson needs your input concerning the City of Rockwool-Ranson. Ranson proposes to amend an ordinance to protect Rockwool rather than the citizens of Jefferson County. Ordinance 302 proposes to amend Parcel 1 of the city more commonly known as Jefferson Orchards on the official Zoning Map of the City of Ranson, West Virginia, for the purpose of reallocating zoning districts (T1 Natural Zone, T2 Rural Zone, T3 Rural Open Zone, T3 Suburban Zone, T4 Suburban Urban Zone, T5 Urban Center Zone and SDI District Industrial) within Smart Code New Community District (SC-NC). Changes are to be in accordance with Chapter 19-20 of the Ranson Municipal Code and Chapter 19A pursuant to West Virginia § 8A-7- 8 and West Virginia § 8A-7- 9.

FOR MORE INFORMATION AND REGISTRATION DETAILS
JeffersonCountyVision.com/ZoningHearing

MESSAGES OF CONCERN

- **Citizens come first.** The Council should vote against this ordinance as it prioritizes the needs of Rockwool before the general welfare of its residents.
 - **Heavy industry at the Jefferson Orchards site is not wanted.** The allocation of an industrial zone can cause detrimental effects to our health, natural resources, local agriculture and thriving economy, as well as nearby schools.
- Whereas, the adoption of the ordinance will not end Ranson's involvement in the fight against Rockwool. It will ensure a legacy of infamy for Council Members and the Mayor.

3

THINGS YOU CAN DO

- WATCH** the virtual first reading on June 16, 2020 at 7 PM
- SIGN UP** to speak and send your comments by June 18, 2020
SPfaltzgraff@ransonwv.us
- ATTEND** the virtual public hearing on June 23, 2020 at 7 PM

In compliance with the WV State of Emergency Declaration and EO 9-20 restrictions regarding public gatherings, the Ranson City Council meeting and public hearing will be accessible by remote online access only

Stacey Pfaltzgraff

From: Maura Johnson <maura_ann@mac.com>
Sent: Tuesday, June 16, 2020 8:07 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on #2017-302. The air emissions, possibility of ground and surface water contamination, and their effect on our interwoven economies threaten the health, safety and welfare of not just Jefferson County but the greater region, including Loudoun and the greater Northern Virginia area.

This zoning would provide for industry that produces large amounts of air emissions. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. Northern Virginia is directly downwind from these emissions. Much of the gaseous, fine particulate, and hazardous emissions can reach Northern Virginia. Further affecting the outdoor air quality of the adjacent portion of Virginia and the ability of these areas to achieve and maintain National Ambient Air Quality Standards (NAAQS) attainment. This will affect agriculture and outdoor leisure and recreation.

For example, Loudoun County has been in nonattainment for the NAAQS 8-hour Ozone standard for the past two years. VOC and NO_x react after they have been emitted to produce ground level ozone. The industry that this rezoning would provide for would produce large amounts of these emissions. This would make it even harder as Loudoun County tries to achieve attainment. As time goes on and the scientific research advances our knowledge and understanding of the extent to which gaseous, particulate and hazardous emissions affect human health the NAAQS standards are likely to be reduced. The effects on air emission from this rezoning will make it only harder for Loudoun and Northern Virginia to meet these standards.

In addition to the concerns about the air, the possible ground and surface water contamination is very concerning to Loudoun and Virginia residents. The site is known to have ground water that is vulnerable to contamination due to the karst hydrogeology. A USGS study demonstrated that the ground water adjacent to the site to be rezoned communicates readily with surface water tributaries of the Potomac River. In addition to direct infiltration where water moves directly from the surface to groundwater via porous limestone bedrock, karst is known to have severe ground instability problems. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater. This makes the aquifer vulnerability in karst areas very high, and contamination with industrial activity such as that provided for by this rezoning too likely.

Loudoun sources its drinking water from the Potomac River, downstream of many West Virginia tributaries that carry water from the epikarst and groundwater aquifer at the site to be rezoned. Loudoun has recently completed the new Trap Rock Water Treatment facility, which draws water from the Potomac River. Loudoun currently provides 40 million gallons and projects to provide 90 million gallons of drinking water a day to customers by 2040
(<https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fLoudounwater.org&c=E,1,jZgfpPNpROx28Ljl8ha3nCpit2e7nsc1>)

ASQ7uslVMvDXY7OQo4wQLErC9Lks09O5VjqXe5fBhuBPpEwuZO1IN3cBRTKisDI11MHJd3BX-vkh2hGpbw4,&typo=1). Therefore, the viability of the Potomac River is a high priority for Virginia residents.

Loudoun and Northern Virginia is one of the fastest growing communities in the country and provides a lot to Jefferson County in their symbiotic relationship. Virginia residents support and enjoy Jefferson County through tourism, as our residents enjoy the natural and historical resources of your county. Virginia residents and businesses support the equine industry in a multitude of ways from providing wagering fans at the races to the Virginia Breeders Association Virginia Certified incentive programs and a strong market for retired racehorses. According to an economic impact study from WVU, at least 40% of Jefferson County residents travel outside of West Virginia for work, a good percentage of those travel to northern Virginia. This rezoning would allow for industry that would negatively affect the economy of both places and this relationship and the benefits for our residents gleaned from it.

This zoning change will provide for industry that will negatively effect the health safety and welfare of the Loudon and Northern Virginia community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Maura Johnson
maura_ann@mac.com
Hamilton 20158

Stacey Pfaltzgraff

From: Hope Jones <mamaofthree579@gmail.com>
Sent: Monday, June 15, 2020 10:14 AM
To: Stacey Pfaltzgraff

CAUTION: External Email

Hello, As a resident of Fox Glen subdivision and an alumni of Jefferson county schools, I implore those in Ranson to keep Rockwool out of our area and I am deeply troubled by the lack of concern for the school aged children that will be directly exposed to an industrial zone. I am appalled that our citizens with underlying health conditions matter none to those who wish to rezone our area into an industrial environment. People over profits should be the goal of our local leaders.

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: jst107@aol.com
Sent: Wednesday, June 17, 2020 9:41 PM
To: Stacey Pfaltzgraff
Subject: Rockwool rezoning

CAUTION: External Email

Ranson Town Council- please vote no to the rezoning of Jefferson Orchards to Rockwool. I taught for 18 years at North Jefferson and have fond memories of field trips to the "Historic Orchard Area" of Jefferson Orchards. Not only is this business a hazard for the children and staff at NJE, but all of those who live in Fox Glen. Is this low income development not important enough to protect? Would you have approved such a business if it was across the street from Ranson Elementary and Orchard Hills? The traffic alone will wreck havoc with the already busy road with parents and buses dropping off and picking up students. NJE does not have the luxury of crossing guards to help with walkers and car traffic as does Ranson Elementary. This production company does not fit with Jefferson County with huge smoke stacks and pollution, that not only can harm humans but the entire horse industry. Jefferson County thrives on the horse industry and all the jobs it provides and farms. Please vote no on the rezoning. Jane Turner, former Ranson resident of 37 years and current Jefferson County resident.

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Brian Kearney <gtsbrian@live.com>
Sent: Wednesday, June 10, 2020 4:14 PM
To: Stacey Pfaltzgraff
Subject: Rockwool industry thanks!!!!

CAUTION: External Email

Thank you for having new industry come to Jefferson county. We are in need of industry that are not tourism or farming related. I fully support the factory after reading all known scientific data (and I am a chemist).

Brian Kearney

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Benita Keller <benitakellerphoto2000@yahoo.com>
Sent: Monday, June 15, 2020 11:52 AM
To: Stacey Pfaltzgraff
Cc: Duke Pierson; Gene Taylor; Don Haines; Scott Coulter; Mike Anderson; Amanda Stroud
Subject: Vote NO on #2017-302

CAUTION: External Email

My Father and his parents lived in Ranson: my Mother was born in the house in Kearneysville where she lived with her parents. My Mother and Father built a new ranger with there own hands in Ranson beside my Dad's parents who gave them the land. While our Grandparnet's house has been torn down, the house my Mother and Father built still stands in Ranson but right on the main now Route 115. When I was three my Mother wanted us to live on a farm as she did and so she "traded" their brand new house for our still family farm 1/2 mile from the Jefferson Orchard. My 89 year old Mother, my older brother and his wife, and my younger brother, his wife and three of their children all still live on the farm and maintain it as such. My brother raised 5 children on our farm and I lived their from the time I was 3 till I was 19 years old. I put myself through college by working at the little gas station on the corner. My grandfather owned Stuckey's Orchard in Kearneysville. I road my horse all over Kearneysville and through Jefferson Orchard to get to Morgan's Grove Park to ride in the horse shows that use to occur there. My mother moved us from Ranson so that we could have clean air, clean water, lots of room to play and grow.. .to live in the country. She did not move us to Kearneysville so Ranson could steal land from Kearneysville to build a foreign polluting toxic industry in our neighborhood. It is environmentally injustice to build such a factory in the most economic struggling community in our county and the most racial diverse community as well. However, it's wrong to even have this out of date coal burning industry anywhere in the world when this company can build a factory that is safe for the environment. However, building it here at this spot as list below in terms of the ground and ground water is dangerous. I believe that this decision was made "underhanded" by many without any real knowledge as to what exactly this plant would be doing and how much pollution and environmental damage it would be doing to our county and the area around us and to the Chesapeake watershed. Ranson should never have annexed Kearneysville for heavy industry. Our county brings in many tourist dollars. RANSON CAN NOT HIDE THERE POLLUTION IN KEARNEYSVILLE. It will affect our entire area. And why wasn't my family in Kearneysville asked if they wanted our town to be part of Ranson. If they and I had a vote: I vote NO then and vote NO NOW. I am still a born and raised Jefferson Countian and graduated from the last graduating class from Shepherdstown High School. I taught in the art department at Shepherd University for 25 years and I still live in Shepherdstown. This is MY county, my STATE and I respectfully ask that you vote no on Ordinance #2017-302. Turn this damage around now. Your grandchildren with thank you. Keep Jefferson County beautiful visually and clean forever for all of us and the future. The world is on our side. Climate Change is real and we here in Jefferson County, West Virginia, can do our part to keep the world a better place to live. Our rural areas are our prizes, our rural roads and our landscapes are our future: not heavy

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

industry, not pipelines, not coal trucks, not air pollution, not sound pollution, not light pollution. AND NOT TOXIC DENMARK'S ROCKWOOL.

Sincerely and Best To All Of You,

Benita Keller, Fine Art Photographer and Photojournalist
Director/Jefferson County Photography Project
Shepherdstown, WV 25443
304 268-2371
<http://www.benitakellerphoto.com>

Stacey Pfaltzgraff

From: Beric Kimball <shebby54@hotmail.com>
Sent: Wednesday, June 17, 2020 9:51 PM
To: Stacey Pfaltzgraff
Subject: Rockwool

CAUTION: External Email

I would like to ask the panel to vote No to the Rockwool rezoning initiative.

I have lived in this area since 1999. We moved here for the rural atmosphere. Bringing in Rockwool will destroy that in more ways than just the pollution to the air, the chemicals in our ground water, and the risks to the children and elderly that this plant will bring. It will destroy the harmony of this county and the surrounding counties.

Who will gain from this abomination, surely not the people of Jefferson County, well maybe a few who drank the kool-aid offered by Rockwell. The waste this will bring to the local environment is a far greater cost than the factory will repay in the minimal number of jobs offered.

I would like to add one last thing, of a personal nature. I retired from the Army with a medical disability. One that has put me in the high risk should I contract Covid-19. I feel I have more control over not getting this disease and having my pulmonary disease flare up and put me at a high risk of death. On the other hand I will have no control over the air I breathe, inundated with toxic chemicals spewing forth from Rockwool's furnaces. That is a choice some else made for me without considering the ramifications.

Beric Kimball
Charles Town

Sent from [Mail](#) for Windows 10

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Brian King <Bk@superlativeevents.com>
Sent: Sunday, June 14, 2020 11:04 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on #2017-302. The air emissions, possibility of ground and surface water contamination, and their effect on our interwoven economies threaten the health, safety and welfare of not just Jefferson County but the greater region, including Loudoun and the greater Northern Virginia area.

Please stop this. It was a mess to start with and it's continued to be a mess. It's literally the worst place for this type of factory, on top of a cheese hole ridden piece of ground that will open up and flood your drinking water with pollutants. Send heavy industry elsewhere in the state and keep Jefferson County beautiful.

This zoning would provide for industry that produces large amounts of air emissions. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. Northern Virginia is directly downwind from these emissions. Much of the gaseous, fine particulate, and hazardous emissions can reach Northern Virginia. Further affecting the outdoor air quality of the adjacent portion of Virginia and the ability of these areas to achieve and maintain National Ambient Air Quality Standards (NAAQS) attainment. This will affect agriculture and outdoor leisure and recreation.

For example, Loudoun County has been in nonattainment for the NAAQS 8-hour Ozone standard for the past two years. VOC and NO_x react after they have been emitted to produce ground level ozone. The industry that this rezoning would provide for would produce large amounts of these emissions. This would make it even harder as Loudoun County tries to achieve attainment. As time goes on and the scientific research advances our knowledge and understanding of the extent to which gaseous, particulate and hazardous emissions affect human health the NAAQS standards are likely to be reduced. The effects on air emission from this rezoning will make it only harder for Loudoun and Northern Virginia to meet these standards.

In addition to the concerns about the air, the possible ground and surface water contamination is very concerning to Loudoun and Virginia residents. The site is known to have ground water that is vulnerable to contamination due to the karst hydrogeology. A USGS study demonstrated that the ground water adjacent to the site to be rezoned communicates readily with surface water tributaries of the Potomac River. In addition to direct infiltration where water moves directly from the surface to groundwater via porous limestone bedrock, karst is known to have severe ground instability problems. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater. This makes the aquifer vulnerability in karst areas very high, and contamination with industrial activity such as that provided for by this rezoning too likely.

Loudoun sources its drinking water from the Potomac River, downstream of many West Virginia tributaries that carry water from the epikarst and groundwater aquifer at the site to be rezoned. Loudoun has recently completed the new

Trap Rock Water Treatment facility, which draws water from the Potomac River. Loudoun currently provides 40 million gallons and projects to provide 90 million gallons of drinking water a day to customers by 2040 (https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fLoudounwater.org&c=E,1,xEzho98B6LuTxrsob8g6ptNBcYMYnI4ZOqRdI3NCF_6GJzz6ilzd4DVNr7q9mE0I_eaqBQdw1AYS38rX3GCE46CL_7Xh9Oy_zaj35HPPSkYXJO81uv6&typo=1). Therefore, the viability of the Potomac River is a high priority for Virginia residents.

Loudoun and Northern Virginia is one of the fastest growing communities in the country and provides a lot to Jefferson County in their symbiotic relationship. Virginia residents support and enjoy Jefferson County through tourism, as our residents enjoy the natural and historical resources of your county. Virginia residents and businesses support the equine industry in a multitude of ways from providing wagering fans at the races to the Virginia Breeders Association Virginia Certified incentive programs and a strong market for retired racehorses. According to an economic impact study from WVU, at least 40% of Jefferson County residents travel outside of West Virginia for work, a good percentage of those travel to northern Virginia. This rezoning would allow for industry that would negatively affect the economy of both places and this relationship and the benefits for our residents gleaned from it.

This zoning change will provide for industry that will negatively effect the health safety and welfare of the Loudon and Northern Virginia community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,
Brian King

--
Brian King
Bk@superlativeevents.com
Hillsboro 20132

Stacey Pfaltzgraff

From: Ed Klejnowski <kski1225@aol.com>
Sent: Sunday, June 14, 2020 6:05 PM
To: Stacey Pfaltzgraff
Subject: Re-re-zoning

CAUTION: External Email

Please extricate yourselves from this nightmare and give the problem some intelligent and creative thought that the city of Ranson is so capable of!

Listen more...talk less

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Ed Klejnowski <kski1225@aol.com>
Sent: Thursday, June 11, 2020 3:42 PM
To: Stacey Pfaltzgraff
Subject: Resining

CAUTION: External Email

I am against rezoning for Rockwool

Listen more...talk less

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Alexander Korovin <Alexander.Korovin@proquest.com>
Sent: Wednesday, June 17, 2020 6:07 PM
To: Stacey Pfaltzgraff
Subject: RE: #2017-302, rezoning of Jefferson Orchards site

CAUTION: External Email

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote "NO" on ordinance #2017-302. This Ordinance would allow industry in Ranson that will significantly harm the municipalities within Jefferson County and beyond effecting the health, welfare, and safety of our community. Harpers Ferry is a national treasure, with the natural and historic resources tourists flock to see each year, and one of the communities that will be negatively impacted by this zoning change.

According to a 2019 study by the West Virginia Tourism Office, Jefferson County generated an average of \$178 million per year in tourism-derived revenue for state and local governments over the last 10 years, more than any other county in West Virginia by at least double. Tourism benefits the businesses and economy of Ranson and Jefferson County producing \$213.7 million in individual earning, 7040 jobs, and \$842.6 million in direct spending here in 2018. We would need 40 Project Shuttles to replace the individual earnings and 59 Rockwools to replace the jobs provided by the tourism industry in Jefferson County. It is important to note that most of the money generated by tourism in Jefferson County comes from neighboring states. In this way, it is like an export: not simply recycling money, but bringing money into the state increasing its wealth. Much of the economy in Harpers Ferry is based on this tourism industry. A threat to this industry poses a threat to the economy and welfare of our community.

One of the important drivers for tourism in Harpers Ferry is the Appalachian Trail. According to the Appalachian Trail Conservancy (ATC), Harpers Ferry is the psychological midpoint of the Trail, and hikers often plan extended stays in Jefferson County with an obvious positive impact. The ATC reports that the smokestacks and associated lights will be visible in the viewshed of 15 vistas on the Appalachian Trail (AT). Studies have shown that quality of vistas and human impact on the environment are not only noticed by visitors, but effect their experience. Another study published in the Journal of Applied Recreation Research, found that points of interests and views drew visitors' attention and had a significant impact on their perception of the trail. A 2009 study in Leisure Sciences revealed that scenic value was a perceptual theme of Appalachian Trail visitors, and that things as simple as dead trees visible in a vista can have a negative impact on visitors' overall perception. Imagine the effect the smokestacks will have from the 15 vistas from which they will be visible. The introduction of industrial activity made possible by the proposed rezoning in Ranson would have a negative effect on the scenic views of beautiful landscapes from the Appalachian Trail in Jefferson County.

The smokestacks are not all visitors will be able to see — the air pollution will create haze. The effect of regional haze on tourists was explored in a review article published in the Atmospheric Environment titled "Impaired Visibility: The Air Pollution People See." A key takeaway on the negative affect of haze on vacationing tourists was summarized as follows:

"Vacations offer an escape from the routine and stress of our daily lives. Vacation destinations are often chosen based on their scenery; vacations are spent gazing at monuments, mountains, clouds, and oceans. Good visibility allows clear observation of distant features and appreciation of the inherent beauty of these scenes...Air pollution, which is often present in both our cities and parks, interferes with these attributes and can ruin the views vacationers travel to enjoy."

People seek bucolic, unspoiled areas to escape the stresses of urban areas. A 2004 study in Environment and Behavior found perceived pollution causes stress while viewing natural scenes has both psychological and physiological benefits, and a 2007 study confirmed these benefits. Two other studies found that people are emotionally affected by poor visibility, and tourists are disappointed when views are obscured by haze.

The combination of smokestacks and haze will mar the viewshed and will not only reduce the positive effects of a scenic landscape but also leave tourists disappointed and dissatisfied with their choice of destination. With these effects the welfare of the Harpers Ferry community would undoubtedly be endangered by the industry that this zoning change will provide for.

Multiple studies have demonstrated that the land at this site to be rezoned is Karst with the highest likelihood of sinkhole development in the county, and that the groundwater aquifer there is incredibly sensitive to contamination from surface water. Further, this site is on an upland plain with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. In this area contamination in surface water communicates easily to the water in the epikarst via diffuse and point infiltration, and the springs at the margins of the upland area are directly affected by the water quality throughout the aquifer. According to Jefferson Orchards Voluntary Remediation Plan with the WVDEP, the groundwater at the site is approximately 60 feet below the ground, and die tests performed by the USGS have shown that groundwater from just adjacent to this site emerged in the headwaters of both the Elk's Run and Rattlesnake Run. This is critically important for Harpers Ferry because the Elk's Run headwaters is a spring about three miles southeast of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River. The headwaters of Rattlesnake Run is a spring about 3.5 miles from the site and is also a tributary of the Potomac River. The Potomac River is the back-up water source for Harpers Ferry. This means that the activity at the site will have a critical influence on the drinking water of Harpers Ferry. In this was the industry permitted by this change in zoning would undoubtedly endanger the health and safety of the community in Harpers Ferry.

I am a resident and property owner in the Shannondale area, which is about 15 miles downwind from the Jefferson Orchards site. According to their WV DEP permit, the proposed Rockwool plant will emit 392 tons of hazardous air pollutants per year -- and that doesn't even account for the heavy truck traffic, which will operate 24 hours per day. I plan to retire here in 10-12 years, but lung cancer and emphysema were not part of my retirement plans. The proposed industrial development of the Jefferson Orchards site will lower our property values, by making Jefferson county an unattractive place to live and work. As is well known, the proposed Rockwool plant will be across the street from an elementary school, and within two miles of four public schools, which together educate 30% of students in Jefferson County. The rezoning of the Jefferson Orchards site for heavy industry in 2017 has got to be the most disastrous and irresponsible public policy decision I have ever witnessed in my lifetime. It is unconscionable to risk the health of thousands of children, and the quality of life of thousands of Jefferson County residents like myself, all in exchange for just 150 jobs. The costs clearly outweigh the benefits!

The dangerous health effects and negative economic consequences from the industrial pollution that this rezoning will allow will be born out over the length of people's lives and that of their decedents. It is an egregious example of environmental injustice that should not be tolerated. This zoning change may be in one of the poorest sections of the county, but the effects will be felt in every part of Ranson and the county.

The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." The industry that this rezoning will allow will jeopardize the health, safety and welfare of Ranson, Harpers Ferry and the whole county. Please vote "NO" on the ordinance #2017-302.

Sincerely,
 Alex Korovin
 548 Lakeside Drive
 Harpers Ferry, WV 25425
 (304)-728-2143

alexander.korovin@proquest.com

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Larry Kruhm <larrykruhm@gmail.com>
Sent: Tuesday, June 16, 2020 2:17 PM
To: Stacey Pfaltzgraff
Subject: Rockwool

CAUTION: External Email

I completely support the city of ranson doing everything it can to encourage Rockwool to establish their business in ranson. Their business and the jobs they will bring will be a great benefit to Jefferson county.

Larry Kruhm
Middleway, WV

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Timothy Lanahan <Timothy.lanahan@icloud.com>
Sent: Tuesday, June 16, 2020 12:45 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astrold@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully ask you to vote NO on Ordinance #2017-302. The industry this zoning change will allow for endangers the health, safety and, welfare of the community, and violates the premise of the smart code zoning that we have spent so much time, effort and federal money employing.

This zoning change will provide for industry that will negatively affect the agriculture industry in Jefferson County and beyond. The combination of the air emissions and threat to the ground water resources could have devastating consequences for the agricultural community of Jefferson County.

The agriculture industry in Jefferson County is hundreds of years old and continues to serve our community well today. According to the economic impact study "A Shared Agenda for Growing West Virginia's Agricultural Economy, Prepared by Fourth Economy for West Virginia Department Of Agriculture West Virginia University Extension Service 2012," Jefferson County is the second highest producing county for crops sales, third highest for fruits and vegetables sales, and in the top 9 counties for sales of animals and animal products.

Agriculture, tourism and the equine industries work synergistically to have an outsized positive impact on the economy in Ranson and Jefferson County as a whole. Agriculture drives tourism by creating agro-tourism opportunities, preserving beautiful open spaces that contribute to the bucolic nature of our county, and providing the locally produced agriculture goods many tourists are look for in our markets and restaurants. Agriculture also supports the equine industry by providing local products like hay and straw, helping maintain pasture land, co-supporting local dual-purpose retail stores, and helping recycle by products. Agriculture helps maintain the way of life that many those who choose to live in Jefferson County enjoy. Industrial manufacturing and industry this zoning will provide for could never achieve these things.

Local agriculture also provides a source of locally produced agricultural goods. It has become apparent with the current pandemic and health emergency. This became a supply chain crisis because as our supply chains have moved to be ever more lean and efficient they lack resiliency and agility. By having a local source of agricultural goods and food we add resiliency and agility into our own economy and community. The agricultural industry in Jefferson County provides this.

A plethora of scientific studies have shown that a variety of air pollutants produced by the type of industry this zoning change would provide for causes decreased yields of both quantity and quality for several of the crops important to Jefferson County including winter wheat and soybeans. Soybeans and wheat are two of the crops significantly affected and two of the most prevalent crops in Jefferson County. Lower crop yields harm the farms and all the members of the down stream supply chain as well as the consumer.

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Recent studies have shown that even small increases in air pollution affect the productivity of agricultural workers. Similar to the reduction in crop yield this will negatively affect the individual workers, businesses, consumers and industry as a whole.

Even more devastating is the possibility of groundwater contamination. The land at the subject location has karst hydrogeology and as such has porous bedrock and severe ground instability problems. The porous bedrock allows rapid diffuse infiltration of surface water into ground water and the severe ground instability problems leads to sinkhole development. Sinkholes provide direct connection of the surface water with the ground water aquifer through point infiltration. In fact, according to a 2012 study by Doctor and Doctor, the subject location and that of Terrapins Neck have the highest sinkhole vulnerability of any sites in Jefferson County. The propensity and easy of diffuse and point infiltration in areas of karst hydrogeology give them very high aquifer vulnerability meaning the aquifer is very vulnerable to contamination. For this reason, this measure has been used for decades by policymakers to set land use regulations.

The WVDEP recognizes development in karst areas puts water resources high-risk for contamination but also recognizes that this is best protected against true local land use and zoning ordinances. WVDEP's guiding document Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." This document also references the Chesapeake Bay Stormwater Network karst stormwater guidance document the CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed. In which it states "...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." Land use policy in Ranson and zoning need to take aquifer vulnerability into consideration as these agencies and documents suggest.

The Jefferson Orchards Voluntary Remediation Plan application reports that the ground water is only 60 feet from the surface at the site. It is described in the scientific literature that this land is an upland plane with large amounts of water in the epikarst, and contamination of this water effects the whole aquifer including the communications with surface water streams. A USGS study demonstrated that the groundwater adjacent to the site communicates readily with several surface water structures and wells miles away from the site. The effects of contamination at this site would go well beyond Ranson fouling large portions of the ground water and surface water in Jefferson County.

Groundwater contamination at the site would have devastating effects on the Agricultural industry in Jefferson county. For geographic and economic reasons it is simply infeasible for the agricultural industry to rely on utility provided water. Based on the scientific literature the site being considered for rezoning is one of the areas of highest aquifer vulnerability in Jefferson County and is inappropriate for the industry that this zoning change will provide for.

The industry that this zoning will provide for will threaten the health, safety, and welfare of the community by threatening the agriculture industry's ability to produce. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
 Timothy Lanahan
 Timothy.lanahan@icloud.com
 Shenandoah Junction 25442

Stacey Pfaltzgraff

From: Pam Langland <mollymcshabby@gmail.com>
Sent: Tuesday, June 16, 2020 7:06 AM
To: Stacey Pfaltzgraff
Subject: Zoning

CAUTION: External Email

As citizens of Kearneysville in Jefferson county we do not want heavy industry at the Jefferson Orchards site. An allocation of an industrial zone can cause detrimental effects to local agriculture and the equine and tourism community. It will impact nearby schools, and can deteriorate air, land and water quality. It will also greatly impact us, our home and our neighborhood here in Kearneysville and negatively affect our quality of life here.

Best,
Ed and Pam Langland
5650 Charles Town Rd.
Kearneysville, WV 25430

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Ryan Lehman <rtlehman90@gmail.com>
Sent: Saturday, June 13, 2020 2:05 PM
To: Stacey Pfaltzgraff
Subject: Rezone

CAUTION: External Email

You all need to reject the ordinance to rezone for Special District Industrial and restore the Ranson Renewed vision.

Ryan L.

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kathy Lloyd <sweens1205@gmail.com>
Sent: Sunday, June 14, 2020 1:46 PM
To: Stacey Pfaltzgraff
Subject: Ranson rezone

CAUTION: External Email

I am a Jefferson County resident and I share these sentiments:

- **Citizens come first.** The City Council Members and the Mayor's first responsibility is to the citizens of Ranson and remaining in harmony with the surrounding Jefferson County community. The Council should vote against this ordinance as it prioritizes the needs of Rockwool before the general welfare of its residents.
- **Heavy industry at the Jefferson Orchards site is not wanted.** The allocation of an industrial zone can cause detrimental effects to the flourishing local agriculture, equine and tourism community, and can impact nearby schools, as well as deteriorate air, land and water quality.
- **Passing this ordinance will ensure a legacy of infamy.** Is this what the Council wants to be known for?
 Kathy Lloyd
 Harpers Ferry
 3042790748

Sent from my iPhone

Stacey Pfaltzgraff

From: Hilary and Rick Lo <lo.family.wv@gmail.com>
Sent: Thursday, June 18, 2020 10:58 AM
To: Stacey Pfaltzgraff
Subject: Our Plea to Ranson City Council

CAUTION: External Email

Dear Ranson City Council Members,

I write on behalf of my family who have lived in Jefferson County for over 22 years. Before each of you is a rare opportunity to correct a grave mistake. We are urging the Council to stand against Special District Industrial reallocation at the Jefferson Orchards site and to consider the health of citizens in its decision.

If Ranson prioritizes the needs of Rockwool over the general welfare of residents, Ranson is vacating its additional duties under its Comprehensive Plan. While General Land Use action item 10 (p. 31) encourages manufacturing, it also states the City will designate ample land that is well-suited for industrial facilities—and will ensure that industrial facilities DO NOT adversely affect the health, safety, or welfare of the community.

In light of all you now know about:

- the existence of sinkholes on the property that put our groundwater at risk
- the leakage risks of a containment pond built on karst geology that will be full of contaminated water
- the adverse impacts of air pollution on residents' lung function that is caused by industrial facilities
- the fact that we live in between ridgelines that trap airflow for long periods of time, concentrating dangerous airborne particulates
- the parcel's proximity to a marginalized, low-income neighborhood of people who are the least able to fight for environmental justice
- the parcel's proximity to an elementary school
- the overwhelming call from the majority of citizens NOT to reallocate the zoning of the district for industrial use

- the fact that adding facilities that burn fossil fuels like coal and natural gas worsen the already dire climate crisis
- the fact that adding heavy industry will decrease property values and cost the region dearly in tax revenue
- the fact that an industrial zone will have a detrimental impact on tourism revenue
- the deterrent that an industrial zone will present to people looking to leave urban areas to move to the country with unspoiled views, clean water and clean air

Your citizens have worked hard to compile and offer to you scientific evidence for each of the points above. Now each of you have the opportunity to make a bold decision that will place you on the right side of history. As a lifelong West Virginian, I have seen time and time again the false promises of heavy industry leaving our state poorer and sicker with every generation. You hold the power to stop that cycle. Please don't fail us now!

Sincerely,
Hilary Lo

Stacey Pfaltzgraff

From: Ralph Lorenzetti <ralph.lorenzetti@gmail.com>
Sent: Wednesday, June 17, 2020 11:16 AM
To: Stacey Pfaltzgraff
Subject: Rezoning

CAUTION: External Email

My opposition is to tall stacks, use of coal & coke as a fuel, and in general the change to the County by allowing heavy industry by zoning modifications. Please note my opposing modifications to Ranson's pre-Rockwool Regulations that allow such to occur in Ranson & Jefferson County!! Sincerely, Ralph Lorenzetti

Attachment: 20200623 - Written Comments - Packet #6 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Damon MacArthur <dmacarthur@synertex.com>
Sent: Wednesday, June 10, 2020 4:41 PM
To: Stacey Pfaltzgraff
Subject: No to Rockwool

CAUTION: External Email

I and my family have lived in Harpers Ferry for just 4 years but we plan on staying forever.

We are against the rezoning that will put Rockwool so close to schools and farms. If you want it in the county, put it somewhere else away from schools and farms.

Voters will not forget who is responsible if Rockwool comes here.

Damon MacArthur
Harpers Ferry, WV

Stacey Pfaltzgraff

From: C Maz <kcmaz@msn.com>
Sent: Saturday, June 13, 2020 2:21 PM
To: Stacey Pfaltzgraff
Subject: ordinance 217-302

CAUTION: External Email

As a resident of Jefferson County. I do NOT want any zoning that would 'benefit' Rockwool. I'm saddened that politicians are putting Rockwool above its citizens wishes regardless of the reason. Unfortunately, I will have to vote 'against' any politician that favors the Rockwool ordinance.

Charles

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Donna McCullough <mcculloughstudio@me.com>
Sent: Tuesday, June 16, 2020 6:29 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on ordinance #2017-302. The type of industry that this ordinance would allow in Ranson would have a negative effect on water and air quality in neighboring states such as Maryland.

The Potomac River provides drinking water and a source of recreation to Maryland residents. Water and air pollution generated within the Potomac River's watershed will inevitably contaminate this valuable waterway. The site of the proposed zoning change in Ranson is located within the Potomac River Watershed.

The type of industry that ordinance #2017-30 would allow in Ranson would utilize large water impoundments, in an area of known karst terrain. This water will be contaminant from several sources including particulate mater that has fallen out from the air emissions and process water. The West Virginia Department of Environmental Protection has published guidelines that specifically discourage extensive development in areas of karst terrain because of the vulnerability of karst aquifers to contamination by surface pollution. Karst features increase surface water and groundwater connectivity and any spills or surface releases quickly percolate into the groundwater. Additionally, sinkholes are common in karst terrain and can cause ruptures in wastewater impoundments. Even if appropriate attempts are made to contain and manage wastewater and other stormwater runoff on-site, there is still a high risk that wastewater could contaminate the groundwater through tears and catastrophic failure of wastewater impoundments. Contaminated groundwater in karst terrain can easily resurface in waterways several miles away, as shown by a USGS tracer study conducted near the site in to be rezoned. The USGS study detected tracer dye in multiple springs and waterways miles from the initial injection site in Ranson. All of these waterways drain into the Potomac River.

Mismanagement of wastewater could also lead to contamination of nearby surface waters. For example, the site of the proposed rezoning in Ranson is in the Rocky Marsh Run watershed. Rocky Marsh Run also drains to the Potomac River. Voting no on ordinance #2017-302 will preserve downstream water quality and help ensure that the Potomac River remains usable for Maryland residents.

Air pollution poses another risk to Maryland residents. The type of industry that ordinance #2017-302 would allow would generate air pollutants like fine particulate matter. According to the US EPA, fine particulates can travel 100s of miles from its original source. Air pollution related to industrial activity in Ranson could easily reach Maryland. Fine particulates have a greater affinity for carrying toxic compounds and their small size allows them to be inhaled more deeply into the lungs. Chronic exposure to fine particulate matter is associated with increased risk of several diseases including Alzheimer's in adults. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease among others. Fine particulate matter also exacerbates regional haze which creates a visible reminder of air pollution. The psychological effects that arise from an increased perception of pollution include stress, anxiety, and unhappiness. Voting no on ordinance #2017-302 will help prevent increased air pollution from negatively affecting the long-term health of Maryland residents.

I again request that you vote no on ordinance #2017-302. Zoning decisions in Ranson and Jefferson County have an undeniable influence on the quality of life in neighboring states.

Sincerely,

--

Donna McCullough
mcculloughstudio@me.com
Westminster 21157

Stacey Pfaltzgraff

From: Carol Miller <canterwoodfarm@gmail.com>
Sent: Tuesday, June 16, 2020 7:55 PM
To: Stacey Pfaltzgraff
Subject: Rock wool Plant

CAUTION: External Email

I oppose construction of this industrial plant in this location where its pollution will affect children at the nearby school, agricultural products (especially vineyards) in Loudoun County, and air quality in western Loudoun which depends on its scenic beauty for tourism.

Carol Miller
16662 Sommertime Ln
Hamilton, VA 20158

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Jamie Miller <soojamie@me.com>
Sent: Tuesday, June 16, 2020 10:28 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote NO. We moved to Jefferson county for its beauty, agriculture, history, and location. We don't want all the reasons we moved here to be affected by smokestacks, pollution, environmental repercussions and even more unknown.

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Jamie Miller
soojamie@me.com
Shepherdstown 25443

Stacey Pfaltzgraff

From: KAREN MILLER <klcm1@aol.com>
Sent: Wednesday, June 10, 2020 12:18 PM
To: Stacey Pfaltzgraff
Subject: Rockwool

CAUTION: External Email

Hello

I write to you today to urge you NOT to rezone Karen L Miller Sent from my iPhone
304.283.2139

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Wally Minnick <wallym@mac.com>
Sent: Tuesday, June 16, 2020 3:54 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

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"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

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present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Wally Minnick
wallym@mac.com
Hagerstown 21740

Stacey Pfaltzgraff

From: Walter Minnick <wallym@me.com>
Sent: Tuesday, June 16, 2020 4:02 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on ordinance #2017-302. The type of industry that this ordinance would allow in Ranson would have a negative effect on water and air quality in neighboring states such as Maryland.

The Potomac River provides drinking water and a source of recreation to Maryland residents. Water and air pollution generated within the Potomac River's watershed will inevitably contaminate this valuable waterway. The site of the proposed zoning change in Ranson is located within the Potomac River Watershed.

The type of industry that ordinance #2017-30 would allow in Ranson would utilize large water impoundments, in an area of known karst terrain. This water will be contaminant from several sources including particulate mater that has fallen out from the air emissions and process water. The West Virginia Department of Environmental Protection has published guidelines that specifically discourage extensive development in areas of karst terrain because of the vulnerability of karst aquifers to contamination by surface pollution. Karst features increase surface water and groundwater connectivity and any spills or surface releases quickly percolate into the groundwater. Additionally, sinkholes are common in karst terrain and can cause ruptures in wastewater impoundments. Even if appropriate attempts are made to contain and manage wastewater and other stormwater runoff on-site, there is still a high risk that wastewater could contaminate the groundwater through tears and catastrophic failure of wastewater impoundments. Contaminated groundwater in karst terrain can easily resurface in waterways several miles away, as shown by a USGS tracer study conducted near the site in to be rezoned. The USGS study detected tracer dye in multiple springs and waterways miles from the initial injection site in Ranson. All of these waterways drain into the Potomac River.

Mismanagement of wastewater could also lead to contamination of nearby surface waters. For example, the site of the proposed rezoning in Ranson is in the Rocky Marsh Run watershed. Rocky Marsh Run also drains to the Potomac River. Voting no on ordinance #2017-302 will preserve downstream water quality and help ensure that the Potomac River remains usable for Maryland residents.

Air pollution poses another risk to Maryland residents. The type of industry that ordinance #2017-302 would allow would generate air pollutants like fine particulate matter. According to the US EPA, fine particulates can travel 100s of miles from its original source. Air pollution related to industrial activity in Ranson could easily reach Maryland. Fine particulates have a greater affinity for carrying toxic compounds and their small size allows them to be inhaled more deeply into the lungs. Chronic exposure to fine particulate matter is associated with increased risk of several diseases including Alzheimer's in adults. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease among others. Fine particulate matter also exacerbates regional haze which creates a visible reminder of air pollution. The psychological effects that arise from an increased perception of pollution include stress, anxiety, and unhappiness. Voting no on ordinance #2017-302 will help prevent increased air pollution from negatively affecting the long-term health of Maryland residents.

I again request that you vote no on ordinance #2017-302. Zoning decisions in Ranson and Jefferson County have an undeniable influence on the quality of life in neighboring states. West Virginia, Virginia nor Maryland does not need industries like these to further pollute the air, water and decrease our quality of life. The long term damaging effect heavily outweighs the initial monetary gain for a few. Thank you for your consideration and respect for health of the citizens in Ranson, West Virginia and Maryland. Sincerely,

--
Walter Minnick
wallym@me.com
Hagerstown 21740

Stacey Pfaltzgraff

From: KEVIN <kevin.d.murphy@comcast.net>
Sent: Wednesday, June 17, 2020 6:04 PM
To: Stacey Pfaltzgraff
Subject: Rockwell rezoning

CAUTION: External Email

Please DO NOT rezone the Rockwool site to 'Special District Industrial.'

Yes, I feel bad for Rockwool, who thought Ranson city leaders were representing Jefferson county residents when the plant was approved.

OTOH, I really don't want heavy industry in our county. Jefferson was blessed with beautiful terrain and spectacular history, perfect for preserving nature and our cultural history.

Please DO NOT rezone the Rockwool site to 'Special District Industrial.' I'm afraid Rockwool will just have to be collateral damage.

Kevin D Murphy
31 Chestnutwood Way
Harper's Ferry WV 25425
3046768774

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Dr. Shelley Viola Murphy <shelleyviola@gmail.com>
Sent: Wednesday, June 17, 2020 2:20 AM
To: Stacey Pfaltzgraff; Shelley Murphy; ransonctymgr@gmail.com
Subject: Opposing the Proposed Ordinance #2017-302-Jefferson Orchards
Attachments: Letter to Ranson City Council Boyd Carter.docx

CAUTION: External Email

Good morning, I have attached a letter in opposition of proposed zoning changes and disruption to the Boyd Carter Memorial Cemetery by Rockwool. Please distribute my letter to the Ranson City Council for the meeting on the 23rd. If there are any questions, you are welcome to call or email me. I would be happy to read my letter during the public zoom meeting. Just let me know. Please confirm your receipt of this letter.

Thank you!

Dr. Shelley Viola Murphy
 Descendant Project Researcher-PCSU/UVA
 Albemarle Charlottesville & Fluvanna Historical Societies-Board Member
 Midwest African American Genealogy Institute (MAAGI)-President/Instructor
 Library of Virginia Board Member
 Averett University Adjunct
 Professional Genealogist
 aka "familytreegirl"
shelleyviola@gmail.com
 434-806-7433

You don't change culture through emails and memos. You change it through relationships ...one conversation at a time. @Steele Thoughts

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

June 17, 2020

To: Ranson City Council, Jefferson County, West Virginia
Via: spfaltzgraff@ransonwv.us.

From: Dr. Shelley Viola Murphy
36 Colonial Road, Palmyra, Virginia
shelleyviola@gmail.com
434-806-7433

RE: Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

This is an open letter expressing opposition to the zoning changes. Last night I received a copy of the proposed zoning changes from a close family friend. I am not able to make an appearance in person but feel strongly that you should hear my voice and the voice of my ancestors. I have written to the Jefferson County Planning and Board Council members before and still being ignored as Rockwool continues to target this African American cemetery. Now the city of Ranson seems to want to share in the not preserving or being in protection mode. I ask you "what if this was your family cemetery", would you allow this? I know there are others besides family members that are also opposed to the zoning changes and have spent numerous hours of research to bring the attention to this matter. To my knowledge their work and voice is also not being heard.

My principal objection is the zoning changes due to the targeted disruption to a sacred family burial ground that should be protected under the laws locally and at the state level. I am appealing to you from a family perspective as a relative of those buried in the Boyd Carter Memorial Cemetery, just as you would, if it was your family cemetery. My ancestors arrived into Jefferson County, Virginia around 1810. My line can go back to 1619 to Hampton (Point Comfort), Virginia with the 20 Odd Negroes arrival to the British Colony of Virginia. Some of the descendants of a line of the 20 odd Negroes are buried in the Boyd Carter Memorial Cemetery. The final resting places of our ancestors, including yours are sacred. When we select a final resting place for our loved one, it is with the full expectation that they will remain there forever. There will be no disturbance. Why is this being ignored? Please help me understand why this little cemetery is on the block for disruption.

The African Americans buried in the Boyd Carter Memorial cemetery will fall into one of these categories: enslaved, segregated, & wronged by the United States government during their lifetime all the way to their graves. The descendants of these African Americans continue to be treated unjustly by government for not protecting and preserving the cemetery as they would do for other cemeteries and burial grounds. At some point, we should see this injustices stopped. Don't you feel it is time to just simply leave the Boyd Carter Memorial Cemetery alone. Slaves were forced to bury their loved ones in places that were considered not valuable land. Burial grounds were often held

by slaveholders and were not allowed to be owned by the slaves and their descendants. What was left alone, now is the center of your attention for all the wrong reasons in my opinion. You know the background of Boyd Carter Memorial Cemetery; I do not need to address this fact. There are trustees and lawyers to handle that. Again, I appeal to you to reconsider and do what is right for the Boyd Carter Memorial Cemetery. Provide them same protection that the US government gives to Native American burial grounds and to your own mother, father, children, and grandparents burial grounds.

Thank you,

Dr. Shelley Viola Murphy /s/
Submitted via email

Stacey Pfaltzgraff

From: Mark Muse <1xmmuse@gmail.com>
Sent: Saturday, June 13, 2020 8:32 AM
To: Stacey Pfaltzgraff
Subject: Ordinance #2017-302

CAUTION: External Email

My name is Mark Muse. I am a long-time resident of Jefferson County, WV.

In my considered opinion it is not too late to undo the corrupt actions taken by the Ranson government that permitted heavy industry to move into Jefferson County. Heavy industry has no place in this county, and particularly in that specific location where any kind of spill will endanger the groundwater that most of us rely upon for our household water.

There are many other concerns related specifically to Rockwool, that would likely apply to other heavy industry that might also locate on this site. No need to go into all of these here, I'm sure you have heard it before. But these are real issues. This is not just a NIMBY issue.

Sincerely,
Mark Muse

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: RitaSean <rise2012@frontier.com>
Sent: Thursday, June 18, 2020 8:58 AM
To: Stacey Pfaltzgraff
Subject: Public Comment - Proposed Rezoning

CAUTION: External Email

Ms. Faltzgraff,

This is in response to the proposed rezoning of the Jefferson Orchards property from "New Community District" to "Special District Industrial". I vehemently oppose this proposal.

I moved to Jefferson County WV in 1993 and what attracted me was the wild and wonderful nature of pasture, mountain, and rivers that share these lands. Bringing in heavy industry (Rockwool) that will pollute my home lands with toxic compounds and carcinogens is counter to everything that Jefferson County stands for. These pollutants will spread far and wide in the air and water systems and will not stop at our borders.

The devious, behind the backs of the public, nature of permitting this project initially was against the will of the people. We cannot allow the proposed rezoning to occur that will permit this heavy industry in our county.

Regards,

Sean Palmer
2043 Terrapin Neck Road
Shepherdstown WV

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: laurel parker <pumpkinflower@gmail.com>
Sent: Tuesday, June 16, 2020 1:08 PM
To: Stacey Pfaltzgraff
Subject: Public Comment Ordinance # 2017-302

CAUTION: External Email

I'm strongly opposed to ordinance #2017-302. This zoning is contrary to the Comprehensive Plan that Ranson residents collaboratively worked on and for which they received a large federal grant. Smart (or intergrated) code puts the public's health, safety, and welfare into the plan, requiring business, housing, and light industry to be compatible with one another. Heavy industry cannot be integrated into the comprehensive plan because urban areas are not compatible with heavy industry. In fact, Rockwool has said it won't allow that type of growth adjacent to it's property. Presenting this zoning with urban areas still listed is disingenuous. It also doesn't make sense to build heavy industry near schools that already exist.

Rezoning this property to Special District Industrial (SDI) will put the health of citizens at risk. The air flow in Jefferson County is too stagnant to carry away large amounts of air pollution created by heavy industry. Increased truck traffic will add to the overload of unhealthy air. Air pollution is the leading cause of death in pollution related death. Children are at an even greater risk for lung disease and cumulative diseases ranging from cancer to reproductive issues and more. Everyone is at risk for lung and heart disease.

If Ranson is planning on rezoning for economic benefit, air pollution will negatively affect our top money-makers in the county: tourism, agriculture, and the equine industry. The county and state could lose millions of dollars in revenue and thousands of jobs because agricultural yields will be lower, horses will be sicker, and tourists vacation in non-polluted areas. All of these are fact-based statements with science and peer reviewed papers and studies backing these conclusions.

Because our county is sitting on rock formations (karst geology), our water is also at risk of being contaminated by many of the chemicals heavy industry uses in production. Our geology is unique in that it doesn't have layers of soil to act as a filtration system. Contaminants travel quickly along rock to our aquifer which is connected throughout the county. Most of us have wells because laying pipeline through rock is an expensive and slow process. I don't think heavy industry should ever be located in an area where drinking water is at risk of being so easily contaminated.

For these reasons, it makes more sense to have light industry and urban zones in our region. I urge you to listen to the citizens and put their interests and health above those of large industrial companies. Please revert back to the Comprehensive Plan for this property. Please vote no on ordinance #2017-302.

Laurel Parker
 180 Pine Knoll
 Shepherdstown, WV

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Yvette Perri <lar.outreach.coordinator@gmail.com>
Sent: Monday, June 15, 2020 2:24 PM
To: Stacey Pfaltzgraff
Cc: al.vanhuyck@gmail.com
Subject: from Loudoun Against Rockwool - letters of support for LAR
Attachments: Loudoun County Equine Alliance Statement Against Rockwool Sept 2018.pdf; Loudoun County Democratic Committee-Press-Statement-1102019.pdf; AG Herring Ltr Rockwool North America Jan 2019.pdf; BoS Letter to DEQ re Air Quality Monitoring Station in Western Loudoun.pdf

CAUTION: External Email

Please find attached letters of support for Loudoun Against Rockwool and against building the Rockwool factory in Jefferson County West Virginia after several members of the Loudoun Against Rockwool group met with these organizations.

The last attachment is the letter that the Loudoun County Board of Supervisors wrote to the Virginia Department of Environmental Quality requesting for an Air Quality Monitoring Station in Western Loudoun County

Thank you.
 Yvette Perri
 LAR Outreach Coordinator
 Loudoun Against Rockwool
www.ToxicRockwool.com

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

**CONTACT:**

Alfonso Nevarez
 Chair Loudoun County Democratic Committee
chair@loudoundemocrats.org
 202.286.5096

Statement on Rockwool

Leesburg, VA - 33rd District House of Delegate candidate Mavis Taintor, Blue Ridge District Supervisor candidate Tia Walbridge, and the Loudoun County Democratic Committee have written a letter to Virginia's Attorney General Mark Herring requesting intervention to protect Loudoun residents and agricultural businesses in Loudoun County from pollution coming from the Rockwool factory in West Virginia.

The new factory is a mere 8 miles from the Loudoun border. The residents of the Commonwealth have had no opportunity to give input on a factory that is likely to pour hundreds of tons of pollutants such as formaldehyde, nitrogen oxides, and sulfur dioxide into our atmosphere annually.

"The health of our families should be the top priority, not the profit of a company. Residents are justifiably worried about the impacts to their lives, they want action from leaders in the community, and assurances of safety," commented Mavis Taintor.

This region is home to a thriving small agribusiness community and a growing agri-tourism industry that ranked third in overall visits for the Commonwealth of Virginia in 2017, welcoming more than 5 million visitors who spent \$1.8 billion, an increase of 4.6% from the previous year. This region also supports 17,497 jobs, which in turn, generated more than \$695 million in wages in 2017.

"Many farmers, both large and small in the region, who are raising families and crops that contribute to our community and our economy, will all be adversely affected by this factory opening on our doorstep. It's important we address this issue now," stated Tia Walbridge.

We commend the Loudoun County Board of Supervisors for researching this issue of importance to Loudoun residents. Unfortunately, they found the County has no recourse. We are concerned about our water, our soil, and our children. As leaders and advocates for western Loudoun we are asking Attorney General Mark Herring to step in and find a solution that protects our neighbors, our economy, and our environment.

<http://www.loudoundemocrats.org>



Loudoun County Equine Alliance

Serving The Loudoun County Equine Community

September, 2018

The Loudoun County Equine Alliance (LCEA) shares your concerns about the construction of the Rockwool manufacturing facility in Ranson, WV. We thank you for requesting that our county take a closer look at this project and examine options for action. We are working within the Loudoun equine industry to obtain more information on the potential effects here.

Our concerns are:

- **Air quality for horses and riders, especially those performing at highly aerobic activities** such as those in training for competition for various horse sports, as many horses in Loudoun County are. We are making inquiries among our equine veterinary community, including veterinarians at the Marion duPont Scott Equine Medical Center, to gather specific data on this subject.
- **The subsequent effects on Loudoun's equine industry if detrimental effects from the plant are established or even perceived by the public.** These could include loss of horse population, reduction of attendance at competitions, reduced value of horse properties, and the subsequent harm to businesses that support the equine industry, such as hay producers, feed suppliers, veterinarians and equine hospitals. The equine industry in Loudoun has been shown to have an annual economic impact of \$181 million per year.
- **The spillover effects on Loudoun's equine industry of the plant's harmful effects on the Thoroughbred racing industry** in our area. The racetrack at Charles Town has been calculated to have an annual economic impact of over \$191 million in Jefferson County (WV) alone, and is the only Thoroughbred racetrack in the region. (There are currently no operating Thoroughbred racetracks in Virginia.)
- **The negative impact the Rockwool plant could have on all sectors of Loudoun's rural economy** (vineyards, B & Bs, agricultural producers, etc.) which are all dependent on beautiful vistas, clean air, excellent growing conditions, etc., and are interdependent on each other.
- **The potential for this Rockwool installation to become the first of many heavy industrial uses** in an area within close proximity to our precious rural countryside.

Again, we appreciate and support your efforts to examine the issue of Rockwool's potential impact on our county.

Sincerely,

Kelly Foltman, DVM, LCEA President
 Michelle King, LCEA Vice President
 Marion Lee, LCEA Secretary
 Stephanie Jennings, LCEA Treasurer
 Louise Cotulla, LCEA Board Member
 Emily Houston, LCEA Board Member
 Christie Kimberlin, LCEA Board Member
 Tori Sullivan, LCEA Board Member
 Janet Vandervaart, LCEA Board Member



COMMONWEALTH of VIRGINIA

Office of the Attorney General

Mark R. Herring
Attorney General

202 North Ninth Street
Richmond, Virginia 23219
804-786-2071
Fax 804-786-1991
Virginia Relay Services
800-828-1120
7-1-1

January 11, 2019

Mr. Jens Birgersson
President & CEO
ROCKWOOL Group

Mr. Trent Ogilvie
President, ROCKWOOL-North America

RE: ROCKWOOL's Planned Manufacturing Site in Jefferson County, West Virginia.

Gentlemen:

In recent months I have heard many Virginia residents voice their growing concerns over the construction and operation of your manufacturing site in Jefferson County, West Virginia. Nearly every town in the county has passed a resolution expressing opposition or concern, and county leadership has also raised concerns and requested additional information and monitoring. I write to you today in order to relay those concerns and to bring to your attention the potential significant environmental impacts your site may have on the Commonwealth of Virginia and its residents.

The chief issues of concern about your proposed operation in Jefferson County are known to you: soil erosion, pollutant runoff, and most significantly for Virginia, the potential emissions into the ambient air of approximately 393 tons per year of hazardous air pollutants (HAP), including mineral fibers, methanol, phenol, and formaldehyde. It is not clear to my staff that you have presented any modeling on the downwind dispersion of these hazardous air pollutants. It is difficult for me to understand how you can proceed with building such a facility, even if tolerated by EPA and the West Virginia Department of Environmental Protection, without understanding the potential harms to human health, the natural environment, and ultimately to the economy of affected Virginia communities. I am also aware that serious concerns have been raised regarding the efficacy of pollution control technology for units and processes at the facility. It is my understanding that ROCKWOOL plans to install and operate control technology that will remove less HAP-laden particulates than would other available technology.

While I understand that you have obtained a Clean Air Act permit from the West Virginia Department of Environmental Protection for the facility, I take very seriously any actions that may endanger Virginians, impact their health, or damage their property. Accordingly, I am requesting that you, as expeditiously as possible, provide my staff with modeling on the downwind dispersion of the hazardous air pollutants, and that you revise your plans to include control technology to eliminate HAP-laden particulates that could impact Virginia communities.

I look forward to your prompt response.

Sincerely,


Mark R. Herring

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)



Loudoun County, Virginia

www.loudoun.gov

Loudoun County Board of Supervisors

1 Harrison Street, SE, 5th Floor, P.O. Box 7000, Leesburg, Virginia 20177
703/777-0204 • Fax 703/777-0421 • bos@loudoun.gov

October 16, 2018

Mr. Matthew J. Strickler
Secretary
Office of the Secretary of Natural Resources
P.O. Box 1475
Richmond, Virginia 23218

Mr. David Paylor
Director
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

RE: Air Quality Monitoring Station in Western Loudoun County

Dear Secretary Strickler and Director Paylor,

Thank you for your responsiveness to our recent questions regarding ROCKWOOL Manufacturing Company (ROCKWOOL). As you are aware, Loudoun County and its citizens are concerned that the ROCKWOOL manufacturing plant being built in Ranson, West Virginia may affect air quality within our region, particularly the air quality attainment goals of Virginia and Northern Virginia. Based on previous discussions, it is our understanding that the Virginia Department of Environmental Quality (VA DEQ) continues to work with the West Virginia Department of Environmental Protection (WV DEP) on appropriate emissions monitoring of the ROCKWOOL plant to ensure Virginia standards are met when crossing the Virginia border. As the air quality authority in Virginia, we appreciate VA DEQ's efforts to ensure the health and safety of our residents and businesses.

Although VA DEQ may be able to review the data coming from the ROCKWOOL facility to determine some level of compliance, it is imperative to understand whether the additional emissions from the plant will negatively affect the air quality of Northern Virginia. The only way to truly assess the impact to our region is to conduct air quality monitoring of the pollutants. The closest air quality monitoring station to the ROCKWOOL plant is in Ashburn, Virginia, which is located approximately 38 miles from the plant. This station monitors for O₃, PM_{2.5} and NO₂. There are no other stations located in Loudoun County.

On October 2, 2018, the Loudoun County Board of Supervisors voted to request that VA DEQ add an air quality monitoring station in western Loudoun County in an appropriate area to ensure the ROCKWOOL plant does not adversely affect air quality in Loudoun and in Northern Virginia (Attachment 1). The County would prefer that the air quality monitoring station be installed in

Letter on Air Quality Monitoring Station in Western Loudoun
October 16, 2018
Page 2

2019 so baseline data can be gathered prior to plant operation in 2020, and that the station monitor, at a minimum, all of the criteria pollutants expected to be produced from ROCKWOOL.

We appreciate your consideration of our request, and ensuring the continued compliance of air quality in Virginia.

Sincerely,

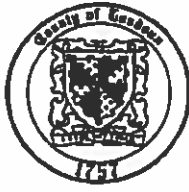


Phyllis Randall
Chairwoman
Loudoun County Board of Supervisors



Ralph Buona
Vice Chairman
Loudoun County Board of Supervisors

Attachment



Loudoun County, Virginia

www.loudoun.gov

Office of the County Administrator

1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000

Telephone (703) 777-0200 • Fax (703) 777-0325

At a business meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Government Center, Board of Supervisors Meeting Room, 1 Harrison Street, S.E., Leesburg, Virginia, on October 2, 2018 at 5:00 p.m.

IN RE: Response to Board Member Initiative: Report on Rockwool Manufacturing Facility in Ranson, West Virginia (Countywide)

Supervisor Higgins moved that the Board of Supervisors send a letter to appropriate state and federal agencies requesting continued collaboration and dialogue to ensure proper air quality monitoring relating to Loudoun County and to address any potential future concerns impacting Loudoun County once the Rockwool site is operational.

Supervisor Higgins further moved that the Board of Supervisors send a letter to the Virginia Department of Environmental Quality (DEQ) and request that a second pollutant monitoring station be installed in Western Loudoun County in an area determined to be appropriate by DEQ.

Seconded by Chairman Randall.

Supervisor Higgins accepted Chairman Randall's Friendly Amendment to require air quality monitoring relating to Loudoun County and to address any potential future concerns impacting Loudoun County before the Rockwool site is operational and ongoing once the site is operational.

Voting on the Amended Motion: Supervisors Buffington, Buona, Higgins, Letourneau, Meyer, Randall, Saines, Umstattd, and Volpe – Yes; None – No.

A COPY TESTE:


 DEPUTY CLERK TO THE LOUDOUN COUNTY
 BOARD OF SUPERVISORS

Stacey Pfaltzgraff

From: Yvette Perri <lar.outreach.coordinator@gmail.com>
Sent: Monday, June 15, 2020 2:17 PM
To: Stacey Pfaltzgraff
Cc: al.vanhuyck@gmail.com
Subject: From Loudoun Against Rockwool - Town Proclamations attached
Attachments: Purcellville Resolution Against Rockwool 01082019.pdf; Hamilton Resolution Against Rockwool 12102018.pdf; Leesburg 2018_12_11_R158 Letter of Support for Loudoun Against Rockwool.pdf; Round-Hill-Adopted-Rockwool-Resolution-01-03-19.pdf; Middleburg Resolution Against Rockwool & Cover Letters to Gov Officials 12182018.pdf; Hillsboro Resolution Against Rockwool 10042018.pdf

CAUTION: External Email

To Whom It May Concern:

This is to follow up a letter to the letter written by Michelle Sutphin. My name is Yvette Perri and I am a resident of Loudoun County. Michelle Sutphin and I worked together and have been a part of the group Loudoun Against Rockwool since August 2018.

Our group presented facts and figures showing how having the Rockwool factory in Ranson in Jefferson County West Virginia would affect the air quality in Loudoun County. The factory would reduce Loudoun County's current air quality, unfavorably affect the rural agricultural industry, and adversely affect the lung health of the citizens of Loudoun County. In this day and age of unprecedented concerns about air quality and healthy lungs, we would like you to consider the ramifications of continuing to build the Rockwool factory in Jefferson County.

After we presented the relevant information to the Mayors and Councils of the various towns in Loudoun County, the towns declared proclamations against the building of the Rockwool facility in West Virginia and supported the cause of Loudoun Against Rockwool.

Please find attached the Proclamations from towns in Loudoun County Virginia.

Sincerely,
 Yvette Perri
 LAR Outreach Coordinator
 Loudoun Against Rockwool
www.ToxicRockwool.com

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Mayor
Kwasi A. Fraser



Town Manager
David A. Mekarski

Council
Chris Bledsoe
Ryan J. Cool
Theodore Greenly
Joel D. Grewe
Nedim Ogelman
Tip Stinnette

221 S. Nursery Avenue
Purcellville, VA 20132
(540) 338-7421
Fax: (540) 338-6205
www.purcellvilleva.gov

**TOWN OF PURCELLVILLE
IN
LOUDOUN COUNTY, VIRGINIA**

RESOLUTION NO. 19-01-01

**PRESENTED: JANUARY 8, 2019
ADOPTED: JANUARY 8, 2019**

A RESOLUTION: REQUESTING VIRGINIA COMMONWEALTH AND LOUDOUN COUNTY AUTHORITIES AND STATE AND FEDERAL LEGISLATORS TAKE ANY AND ALL ACTION, INCLUDING LEGAL ACTION, TO HALT CONSTRUCTION OF THE ROCKWOOL FACILITY IN JEFFERSON COUNTY, WEST VIRGINIA

WHEREAS, the northwest quadrant of Loudoun County is culturally and economically dependent upon an environment free from excessive air and water pollution that would harm its citizens' health, degrade its agricultural products, inhibit and discharge tourism, and devalue its citizens' quality of life and property values, and

WHEREAS, the Town of Purcellville is situated within 20 miles of Ranson, West Virginia, and

WHEREAS, the prevailing winds reaching Purcellville and the northwest quadrant of Loudoun County bring with air and any pollution contained therein directly from Jefferson County, West Virginia, impacting the people, water, livestock, and plants in Loudoun County, and

WHEREAS, the state of West Virginia has granted Rockwool Corporation a permit for the release of 392 tons per year of hazardous air pollution, to be emitted from a proposed manufacturing plant in the town of Ranson, West Virginia, and

WHEREAS, currently the measured hazardous air pollution emitted in Jefferson County, West Virginia and Loudoun County, Virginia is negligible, and

WHEREAS, the 392 tons per year of hazardous air pollution to be permitted by West Virginia will have direct and detrimental impact on the health of the citizens of Loudoun County, its agricultural products, its businesses, and its natural attributes so dependent on clean air and water, and


A RESOLUTION: REQUESTING VIRGINIA COMMONWEALTH AND LOUDOUN COUNTY AUTHORITIES AND STATE AND FEDERAL LEGISLATORS USE ANY AND ALL LEGAL POWERS TO HALT CONSTRUCTION OF THE ROCKWOOL FACILITY IN JEFFERSON COUNTY, WEST VIRGINIA

WHEREAS, thousands of residents of Jefferson County, West Virginia, and Loudoun County, Virginia have organized to appeal for reconsideration of the permit for the release of 392 tons per year of hazardous air pollution from the Rockwool facility, and

WHEREAS, the health of the citizens and economy of the Town of Purcellville and Loudoun County will be imperiled by the action of emitting 392 tons of hazardous air pollution annually into the air that residents and visitors to the Town of Purcellville and Loudoun County breathe.

THEREFORE, BE IT FURTHER RESOLVED by the Town of Purcellville Town Council that the Town requests that Governor Ralph Northam, Attorney General Mark Herring, Congresswoman Jennifer Wexton, Senator Tim Kaine, Senator Mark Warner, Senator Dick Black, Delegate Dave LaRock, Delegate Wendy Gooditis, Chairwoman Phyllis Randall, Loudoun County Board of Supervisors, and Tony Buffington, Supervisor, Blue Ridge District, take any and all action, including legal action, to bring an immediate halt to the construction of the Rockwool facility until a more comprehensive study of the impact on Virginia has been completed, including a designated demographic impact zone for air quality, drinking and ground water sources.

ADOPTED THIS 8th DAY OF JANUARY, 2019.


Kwasi A. Fraser, Mayor
Town of Purcellville

ATTEST:


Diana Hays, Town Clerk

**TOWN OF HAMILTON
LOUDOUN COUNTY, VIRGINIA**

RESOLUTION: 2018-17 **PRESENTED:** December 10, 2018 **ADOPTED:** December 10, 2018

A RESOLUTION: REQUESTING VIRGINIA COMMONWEALTH AND LOUDOUN COUNTY AUTHORITIES AND STATE AND FEDERAL LEGISLATORS USE ANY AND ALL LEGAL POWERS TO HALT CONSTRUCTION OF THE ROCKWOOL FACILITY IN JEFFERSON COUNTY, WEST VIRGINIA

- WHEREAS,** the northwest quadrant of Loudoun County is culturally and economically dependent upon an environment free from excessive air and water pollution that would harm its citizens' health, degrade its agricultural products, inhibit and discharge tourism, and devalue its citizens' quality of life and property values, and
- WHEREAS,** the Town of Hamilton is situated within 16 miles of Ranson, West Virginia and,
- WHEREAS,** the prevailing winds reaching Hamilton and the northwest quadrant of Loudoun County bring with air and any pollution contained therein directly from Jefferson County, West Virginia, impacting the people, water, livestock, and plants in Loudoun County, and,
- WHEREAS,** the State of West Virginia has granted Rockwool Corporation a permit for the release of 392 tons per year of hazardous air pollution, to be emitted from a proposed manufacturing plant in the Town of Ranson, West Virginia, and
- WHEREAS,** currently the measured hazardous air pollution emitted in Jefferson County, West Virginia and Loudoun County, Virginia is negligible, and
- WHEREAS,** the 392 tons per year of hazardous air pollution to be permitted by West Virginia will have direct and detrimental impact on the health of the citizens of Loudoun County, its agricultural products, its businesses, and its natural attributes so dependent on clean air and water, and
- WHEREAS,** thousands of residents of Jefferson County, West Virginia, and Loudoun County, Virginia have organized to appeal for reconsideration of the permit for the release of 392 tons per year of hazardous air pollution from the Rockwool facility, and
- WHEREAS,** the health of the citizens and economy of the Town of Hamilton and Loudoun County will be imperiled by the action of emitting 392 tons of hazardous air pollution annually into the air that the residents and visitors to the Town of Hamilton and Loudoun County must breathe,

THEREFORE, BE IT RESOLVED by the Hamilton Town Council that the Town requests the Governor and Attorney General of the Commonwealth of Virginia, the Loudoun County Board of Supervisors, and the Town's state and federal legislative representatives take any and all legal action to bring an immediate halt to the construction of the Rockwool facility until a more comprehensive study of the impact on Virginia has been completed, including a designated geographic impact zone for air quality, drinking and ground water sources.

ADOPTED THIS 10th DAY OF December 2018


David R. Simpson, Mayor

ATTEST: 
Jennifer Noel, Town Recorder

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

The Town of
Leesburg,
Virginia

PRESENTED: December 11, 2018

RESOLUTION NO. 2018-158

ADOPTED: December 11, 2018

A RESOLUTION: AUTHORIZING THE MAYOR TO SEND A LETTER OF SUPPORT FOR LOUDOUN AGAINST ROCKWOOL

WHEREAS, in April 2018, the State of West Virginia issued a permit allowing the release of 392 tons of potentially hazardous air pollution per year to the Rockwool Corporation for a proposed mineral wool manufacturing plant to be located in the City of Ranson, Jefferson County, West Virginia; and


WHEREAS, the proposed Rockwool plant site is located just ten miles from Loudoun County; and

WHEREAS, residents of Jefferson County, West Virginia, and Loudoun County, Virginia have organized to appeal for reconsideration of the Rockwool air permit, citing air pollution concerns; and

WHEREAS, representatives from Loudoun Against Rockwool made a presentation to the Leesburg Town Council on November 13, 2018, and requested that the Council send a letter in support of their request to halt the construction of the plant until a comprehensive study of the environmental impacts to Virginia is completed.

THEREFORE, RESOLVED, by the Council of the Town of Leesburg in Virginia, the Mayor is authorized to send a letter in support of Loudoun Against Rockwool.

PASSED this 11th day of December, 2018.


 Kelly Burk, Mayor
 Town of Leesburg

ATTEST:


 Clerk of Council



**TOWN OF ROUND HILL
LOUDOUN COUNTY, VIRGINIA**

RESOLUTION: 2018-12

PRESENTED: January 3, 2019

ADOPTED: January 3, 2019

A RESOLUTION: REQUESTING VIRGINIA COMMONWEALTH AND LOUDOUN COUNTY AUTHORITIES, AND STATE AND FEDERAL LEGISLATORS, USE ANY AND ALL LEGAL POWERS TO STRICTLY ENFORCE ALL POSSIBLE ENVIRONMENTAL REGULATIONS FOR THE ROCKWOOL FACILITY IN JEFFERSON COUNTY, WEST VIRGINIA

WHEREAS, Loudoun County and the Town of Round Hill are culturally and economically dependent upon an environment free from excessive air and water pollution that would harm its citizens' health, degrade its agricultural products, inhibit and discharge tourism, and devalue its citizens' quality of life and property values, and

WHEREAS, the Town of Round Hill is an Appalachian Trail Community, and,

WHEREAS, the Town of Round Hill is situated within 12 miles of Ranson, West Virginia, the potential location of the Rockwool facility, and,

WHEREAS, the proximate location of the facility to Loudoun County and the Town of Round Hill could result in damaging air and water pollution, impacting the citizens, economy, water, livestock, and plants in Loudoun County and the Town of Round Hill;

THEREFORE, BE IT RESOLVED by the Mayor and members of the Town Council of Round Hill that the Town requests the Governor and Attorney General of the Commonwealth of Virginia, the Loudoun County Board of Supervisors, and the Town's state and federal legislative representatives, take any and all legal action to fully and strictly enforce all local, state, and Federal environmental regulations on the potential Rockwool facility to the maximum legal extent to protect our residents and local economy.

BE IT FURTHER RESOLVED, that the Mayor and members of the Town Council of Round Hill strongly encourage our State officials to take action as appropriate to protect our residents and local economy;

AND BE IT FURTHER RESOLVED, if in the event the facility becomes operational, a monitoring plan including baseline and recurring air and water sampling be implemented and enforced in compliance with all local, state, and Federal environmental regulations.

ADOPTED THIS 3RD DAY OF JANUARY 2019

Scott T. Ramsey, Mayor

ATTEST:

Melissa K. Hynes

 Melissa K. Hynes, Town Clerk

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Town Of Middleburg

County of Loudoun

10 West Marshall Street
 Post Office Box 187
 Middleburg, Virginia 20118-0187
 Telephone: (540) 687-5152
 Fax: (540) 687-3804
 www.middleburgva.gov



TOWN COUNCIL

Trowbridge M. Littleton, Mayor
 Darlene Kirk, Vice Mayor
 Chris W. Bernard
 J. Kevin Daly
 Kevin Hazard
 Peter Leonard-Morgan
 Phillip M. Miller
 Cindy C. Pearson

December 18, 2018

The Honorable Ralph Northam, Governor
 Commonwealth of Virginia
The Way Ahead
 P. O. Box 1475
 Richmond, Virginia 23218

RE: Resolution Encouraging State Investigation of the Impacts of Rockwool Facility

Dear Governor Northam,

The Middleburg Town Council, during its meeting held December 13, 2018, voted to adopt the attached resolution requesting the Commonwealth of Virginia conduct additional studies of the potential air quality impacts within the Rockwool facility's projected plume range in Western Loudoun County, as well as conduct the necessary testing to determine the potential impacts of the facility on our local water quality.

On behalf of the Mayor and Members of Town Council, we would appreciate your consideration of our position.

Most Cordially,

Rhonda S. North, MMC
 Town Clerk

RSN\

Enclosure

Town Of Middleburg

County of Loudoun

10 West Marshall Street
 Post Office Box 187
 Middleburg, Virginia 20118-0187
 Telephone: (540) 687-5152
 Fax: (540) 687-3804
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TOWN COUNCIL

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 Darlene Kirk, *Vice Mayor*
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 Philip M. Miller
 Cindy C. Pearson

December 18, 2018

The Honorable Jill Holtzman Vogel
 Senate of Virginia
 117 E. Piccadilly Street
 Winchester, Virginia 22601

RE: Resolution Encouraging State Investigation of the Impacts of Rockwool Facility

Dear Senator Vogel,

The Middleburg Town Council, during its meeting held December 13, 2018, voted to adopt the attached resolution requesting the Commonwealth of Virginia conduct additional studies of the potential air quality impacts within the Rockwool facility's projected plume range in Western Loudoun County, as well as conduct the necessary testing to determine the potential impacts of the facility on our local water quality.

On behalf of the Mayor and Members of Town Council, we would appreciate your consideration of our position.

Most Cordially,

Rhonda S. North, MMC
 Town Clerk

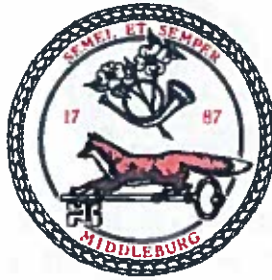
RSN\

Enclosure

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 Kevin Hazard
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 Cindy C. Pearson

December 18, 2018

The Honorable Wendy Gooditis
 Virginia House of Delegates
 P. O. Box 180
 Boyce, Virginia 22620

RE: Resolution Encouraging State Investigation of the Impacts of Rockwool Facility

Dear Delegate Gooditis,

The Middleburg Town Council, during its meeting held December 13, 2018, voted to adopt the attached resolution requesting the Commonwealth of Virginia conduct additional studies of the potential air quality impacts within the Rockwool facility's projected plume range in Western Loudoun County, as well as conduct the necessary testing to determine the potential impacts of the facility on our local water quality.

On behalf of the Mayor and Members of Town Council, we would appreciate your consideration of our position.

Most Cordially,

Rhonda S. North, MMC
 Town Clerk

RSN\

Enclosure



**RESOLUTION ENCOURAGING A STATE INVESTIGATION OF THE IMPACTS
OF THE CONSTRUCTION OF A ROCKWOOL FACILITY IN RANSON, WEST VIRGINIA
AND THE TAKING OF ACTION TO PROTECT VIRGINIA'S RESIDENTS AS NECESSARY**

WHEREAS, according to published reports, the City of Ranson and the County of Jefferson, West Virginia, have approved the construction of a \$150 million insulation manufacturing plant located off Route 9; and,

WHEREAS, the approved location is approximately ten miles from the West Virginia/Virginia border and eight miles from the Harpers Ferry National Historic Park where the Potomac and Shenandoah Rivers converge; and,

WHEREAS, the factory's smokestacks are anticipated to be twenty-one stories high and will be seen from several points of the Appalachian Trail, including three in Loudoun County; and,

WHEREAS, based on the predominant wind pattern, the majority of the pollutants from the smokestacks will travel towards Loudoun County, impacting air quality in our area; and,

WHEREAS, the air permit for this facility allows for the emission of known carcinogens that are directly associated with increased incidents of childhood and adult cancers; cardiovascular, pulmonary, reproductive and nervous system maladies; and, birth defects in humans, as well as ill effects on livestock and agricultural yields; and,

WHEREAS, the facility will sit on top of the densest area of Karst topography in Jefferson County, which is prone to sinkholes; and,

WHEREAS, if a sinkhole(s) develop and materials from the factory deposit into the breach, even if by accident, this could contaminate the groundwater that makes its way into Loudoun County's streams, creeks and well systems; and,

WHEREAS, Rockwool has already been cited by the West Virginia DEP for several site work violations relating to storm water management and sink holes; and,

WHEREAS, the Town of Middleburg is concerned about the impact this manufacturing facility could have on Loudoun County's environment, residents, businesses and tourism industry;

NOW, THEREFORE BE IT RESOLVED that the Mayor and Members of the Town Council of Middleburg, Virginia hereby request that the Commonwealth of Virginia conduct additional studies of the potential air quality impacts within the factory's projected plume range in Western Loudoun County, as well as conduct the necessary testing to determine the potential impacts of the facility on our local water quality.


BE IT FURTHER RESOLVED that the Mayor and Town Council strongly encourage our State officials to take action as appropriate to protect our residents and local economy, including bringing a lawsuit on behalf of the Commonwealth if necessary.

APPROVED:



Trowbridge M. Littleton, Mayor

ATTEST:



Rhonda S. North, MMC
Town Clerk

This resolution was adopted by the Town Council of the Town of Middleburg, Virginia on the 13th day of December, 2018.

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)



Resolution 2018-10-004:

REQUESTING VIRGINIA COMMONWEALTH AND LOUDOUN COUNTY AUTHORITIES AND STATE AND FEDERAL LEGISLATORS USE ANY AND ALL LEGAL POWERS TO HALT CONSTRUCTION OF THE ROCKWOOL FACILITY IN JEFFERSON COUNTY, WEST VIRGINIA, PERMITTED TO EMIT 392 TONS OF HAZARDOUS POLLUTION ANNUALLY INTO THE AIR RESIDENTS OF THE TOWN OF HILLSBORO AND LOUDOUN COUNTY MUST BREATHE

MOTION: Moskal

SECOND: Oxman

WHEREAS, the historic Town of Hillsboro and nationally recognized Hillsboro Historic District is situated in the gap of the Short Hill Mountains in the rural Northwest quadrant of Loudoun County, surrounded by mountain side forests and historic and productive farmlands, recreational and scenic attractions, and

WHEREAS, the Town of Hillsboro has been at the forefront in the efforts to preserve the Greater Hillsboro historic assets, conserve and support the area farmlands and rural essence, and protect the environmental quality of the area, and the revitalization of the area's economy that is based on agricultural production, agro-tourism and recreational-based tourism, and

WHEREAS, in the past 15 years the Greater Hillsboro area has seen the establishment of more than a dozen vineyards and wineries, farm breweries, numerous small specialty farming operations and a continuation of centuries-old traditional farming and livestock operations, all dependent on clean air and water, and

WHEREAS, the Greater Hillsboro area has seen a significant growth of tourism and the expansion of leisure travel accommodations to encompass the largest concentration of bed & breakfast inns in Loudoun County, hosting thousands of visitors seeking to enjoy the rural surroundings and recreational activities as well as the mountain vistas and clean air, and

WHEREAS, the northwest quadrant of Loudoun County is culturally and economically dependent upon an environment free from excessive air and water pollution that would harm its citizens' health, degrade its agricultural products, inhibit and discourage tourism and devalue its citizens' quality of life and property values, and

WHEREAS, the Town of Hillsboro is situated within five miles of the West Virginia border and within 10 miles of the city of Ranson, West Virginia, and the Greater Hillsboro area fully abuts and shares a 17-mile border with Jefferson County, West Virginia, and

WHEREAS, the prevailing winds reaching the northwest quadrant of Loudoun County bring with it air and any pollution contained therein directly from Jefferson County, West Virginia, impacting the people, water, livestock and plants in Loudoun County, and

WHEREAS, the State of West Virginia has granted the Rockwool corporation a permit for the release of 392 tons per year of hazardous air pollution, to be emitted from a proposed manufacturing plant in the Town of Ranson, West Virginia, approximately 10 miles from the Town of Hillsboro, and

WHEREAS, currently the measured hazardous air pollution emitted in Jefferson County, West Virginia and Loudoun County, Virginia is negligible, and

WHEREAS, the 392 tons per year of hazardous air pollution to be permitted by the State of West Virginia will be most concentrated and have the most direct and detrimental impact on the health of the Virginian citizens of the Town of Hillsboro and Loudoun, its agricultural products, its businesses and its natural attributes so dependent on clean air and water, and

WHEREAS, the State of West Virginia, the County of Jefferson, West Virginia, and the Town of Ranson, West Virginia, have provided financial assistance and forgivable loans to the Rockwool corporation to encourage the establishment of this facility in close proximity to the Town of Hillsboro and Loudoun County, Virginia, and

WHEREAS, thousands of residents of Jefferson County, West Virginia, and Loudoun County, Virginia, have organized to appeal for reconsideration of the permit for the release of 392 tons per year of hazardous air pollution from the Rockwool facility and,

WHEREAS, the health of the citizens and economy of the Town of Hillsboro and Loudoun County will be directly imperiled by the action of emitting 392 tons of hazardous air pollution annually into the air that the residents of and visitors to the Town of Hillsboro and Loudoun County must breathe, and

WHEREAS, it is the duty and obligation of the elected and appointed officials of the Town of Hillsboro, Loudoun County and Commonwealth of Virginia to exercise any and all powers to protect the life, health and wellbeing of their citizens,

NOW, THEREFORE, BE IT RESOLVED by the Hillsboro Town Council that the Town of Hillsboro requests the Governor and Attorney General of the Commonwealth of Virginia, the Loudoun County Board of Supervisors and the Town of Hillsboro's state and Federal legislative representatives take any and all legal action to immediately bring to a halt the construction of the Rockwool facility until a more comprehensive study of the impact on Virginia has been completed, including a designated geographic impact zone for air quality, drinking and ground water sources, and

BE IT FURTHER RESOLVED, if in the event the facility becomes operational, a monitoring plan including baseline and recurring air quality sampling be implemented and all costs of study and monitoring are borne by Jefferson County or the State of West Virginia.

VOTE:

AYES: Vance, Moskal, Marasco, Oxman, Forbes

NAYS: None

ABSTENTIONS: None

ABSENT FOR VOTE: Johnston

APPROVED October 29, 2018



ROGER L. VANCE, MAYOR

ATTEST: 

CLAUDIA FORBES, ACTING RECORDER

Save OUR Loudoun

LOUDOUNAGAINSTROCKWOOL@GMAIL.COM
TOXICROCKWOOL.COM

*Rachel Womer
Keri Fornino
Yvette Perri
Michelle Sutphin*

Loudoun Against Rockwool

- Facebook group formed in August of 2018, now up to 2,100 members
- Loudoun Against Rockwool formalized September 9, 2018
- Mailed 200 letters from Loudoun residents to the Governor, Senators and Attorney General
- Met with:
 - Hillsboro, Hamilton, Purcellville, Middleburg, Leesburg, Round Hill Town Councils
 - Loudoun Beekeepers Association
 - Loudoun Equine Alliance
 - Loudoun Conservancy and Preservation Commission
 - Jefferson County Vision Board of Directors
 - Loudoun Rural Economic Development Council
- Future Goals:
 - Spread awareness
 - Raise funds for Jefferson County Vision legal fund
 - Continue to advocate for safe air, soil and water within Loudoun

What is Rockwool?

- Danish company that manufactures insulation and sound deadening panels.
- 460,000 sf facility in Ranson, WV on a 130 acre parcel
- Will have two, 220 ft tall smokestacks
- Estimates of 100 tractor trailers a day
- 24-7 operations



How Bad is the Pollution?

- Rockwool estimates they will emit 308,000,000 pounds (154,292 tons) of:
 - Carbon Monoxide
 - Nitrogen Oxide
 - PM 2.5: Inhalable Fine Particulate
 - PM 10: Inhalable Coarse Particulate
 - Sulfur Dioxide
 - Volatile Organic Compounds
 - Sulfuric Acid Mist
 - Hazardous Air Pollutants
 - Carbon Dioxide Equivalents

Summary of PSD Applicability for Regulated NSR Pollutants

Regulated NSR Pollutant	Project Potential Emissions (ton/year)	PSD SER (ton/year)	PSD Review Req'd?
NO _x	238.96	40	Yes
CO	71.40	100	Yes
VOC	471.41	40	Yes
SO ₂	147.45	40	Yes
PM ⁽¹⁾	129.23	25	Yes
PM ₁₀	153.19	15	Yes
PM _{2.5}	133.41	Primary PM _{2.5} : 10 NO _x : 40 SO ₂ : 40	Yes
O ₃	NO _x : 238.96 VOC: 471.41	NO _x : 40 VOC: 40	Yes
Lead	0.0002	0.6	No
H ₂ SO ₄ Mist	16.37	7	Yes
Fluorides ⁽²⁾	0.03	3	No
H ₂ S	-	10	No
Reduced Sulfur Compounds ⁽³⁾	-	10	No
Total Reduced Sulfur	-	10	No
CO ₂ e	152,934.82	75,000	Yes

Notes:

1. As clarified in EPA's October 12, 2012 rulemaking (Implementation of the NSR Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}): Amendment to the Definition of "Regulated NSR Pollutant" Concerning Condensable Particulate Matter), "particulate matter emissions" are distinguished as three separate pollutants having separate regulatory classifications and requirements

Source: Rockwool Prevention of Significant Deterioration Application for the Construction of a Mineral Wool Manufacturing Facility

What we Know about Rockwool, Mississippi



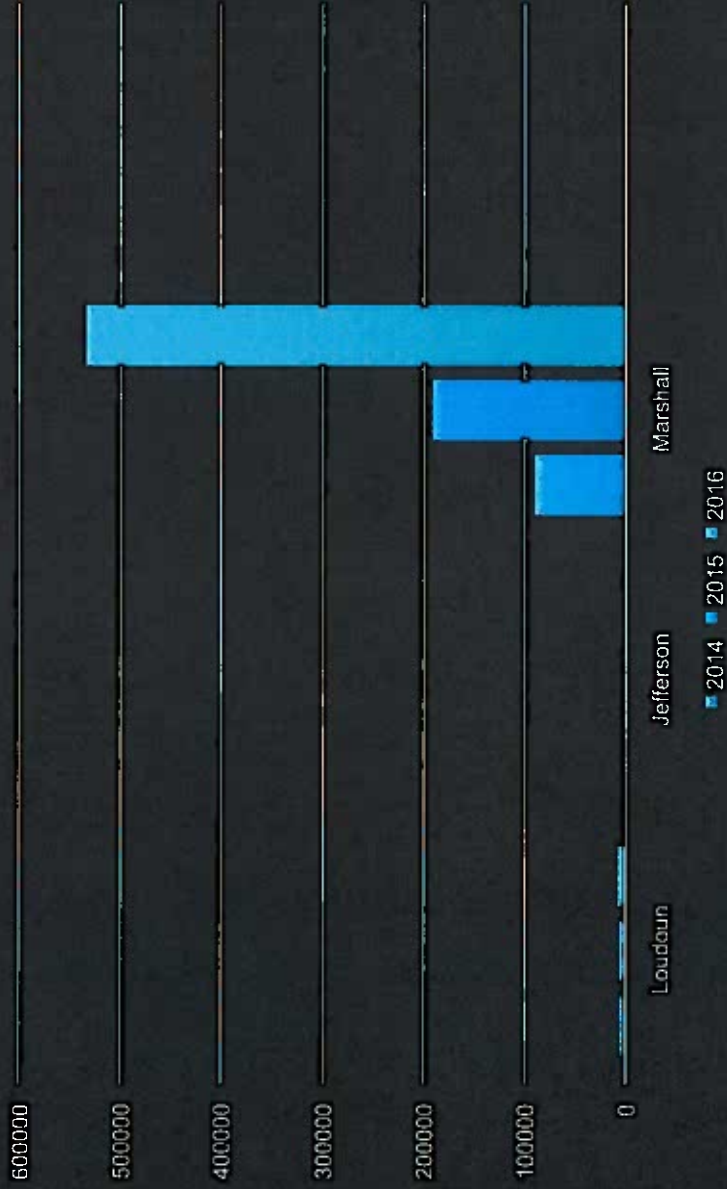
Toxics Release Inventory (TRI) in 2016			
	Rockwool MS	Jefferson County, WV	Percentage Increase
Factory Total	539,509 lbs	18 lbs	2.9 Million %
Industry Median	15,932 lbs	15,932 lbs	3,286 %
State Median	819 lbs	2,048 lbs	26,243 %
US Median	790 lbs	790 lbs	68,192 %

5

Source: EPA RSEI Version 2.3.0

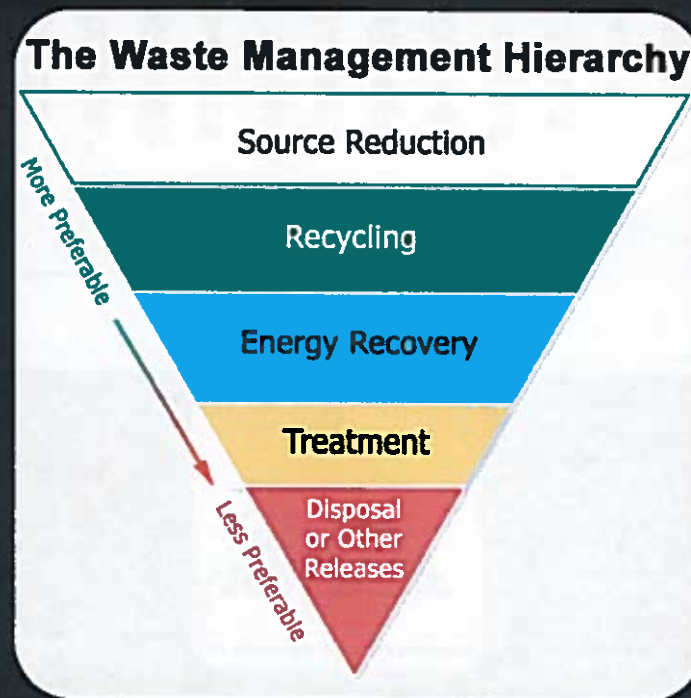
Loudoun/Jefferson/Marshall County Releases

TRI Air Releases (in pounds)



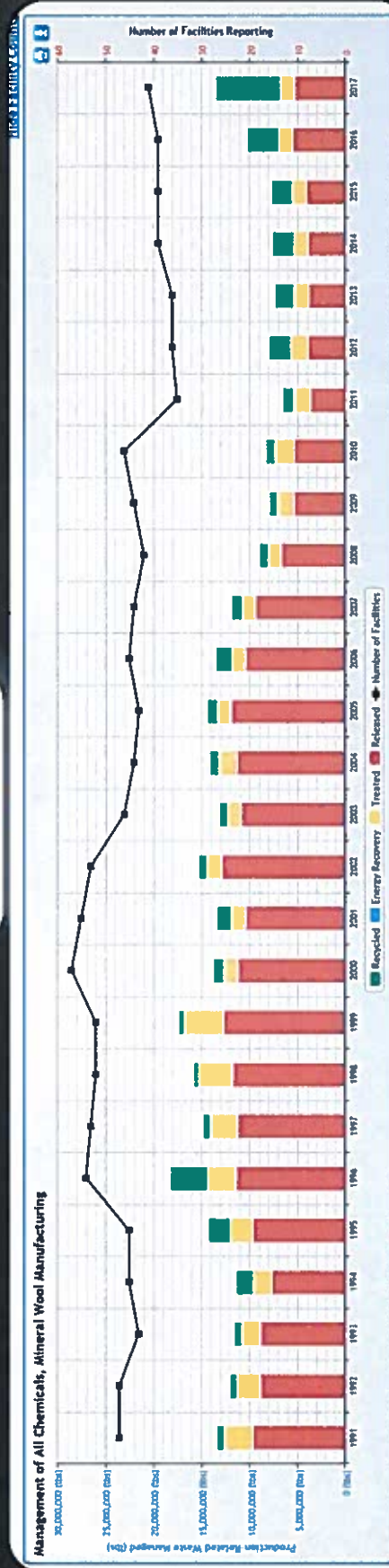
Source: EPA RSEI Version 2.3

The EPA Waste Management Hierarchy



7

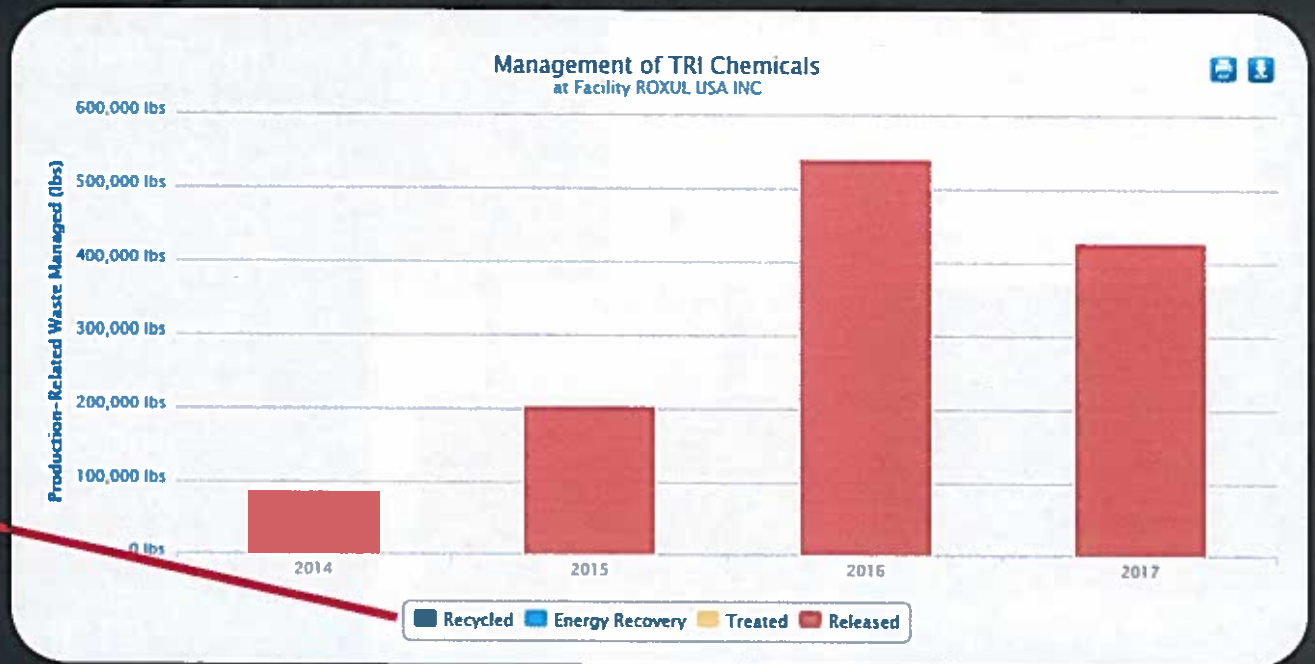
Mineral Wool Manufacturers Over the Years



Source: EPA TRI P2 Data

“We Believe in Protecting the Environment”

- From 2014-2017, NONE of their total Toxic Release Inventory from their Mississippi plant was mitigated. 100% was released.

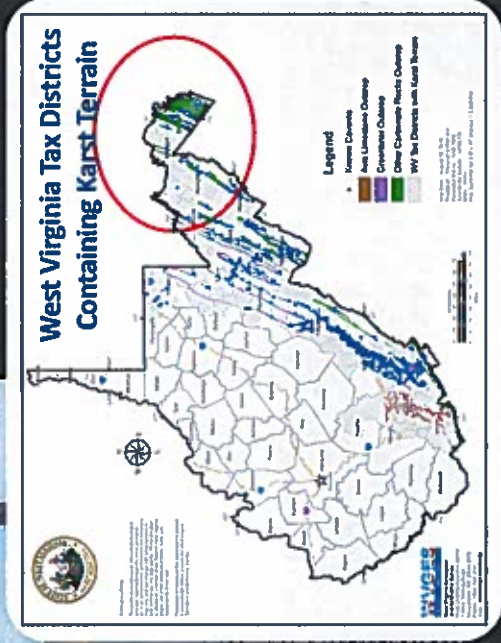


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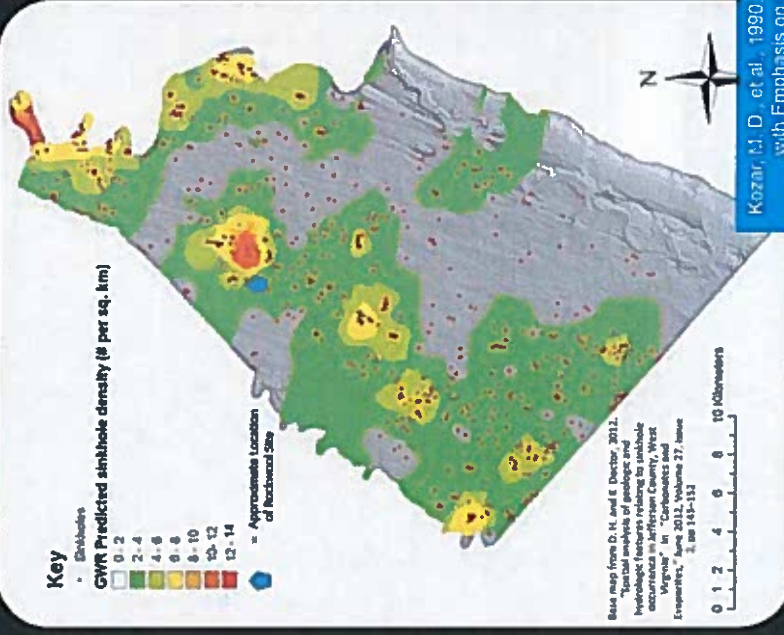
Source: EPA TRI P2 Data

Karst Districts

- Karst Topography is formed when water dissolves and erodes soft rock and leaves landscapes behind such as caves, cliffs and SINKHOLES.
- The WV panhandle is full of Karst areas which are susceptible to absorbing and transporting toxins through our waterways.



Water, Water, Everywhere but not a Drop to Drink



Rockwood will be located within a highly dense area of predicted Karst sinkholes. If an accident occurs, contaminants can spread quickly within the water supply which will reach Loudoun.

In the 1990s, a county study injected dye into a well in the Elk Run watershed. In less than two weeks the dye was also found in Rocky Marsh Run, almost 8 miles away. It moved rapidly underground over a large landscape.



Kozar, J. D. et al. 1990. Geohydrology, Water Availability, and Water Quality of Jefferson County, West Virginia, with Emphasis on the Carbonate Area. U.S. Geological Survey, Water-Resources Report 90-4118)



We've Got a Sinking Feeling...



WTOP article cites a total of 10 sinkholes found on the property

3, 2, 1...Impacts

- WATER
 - Potential for well water contamination, especially if sinkholes appear.
- AIR
 - Inhalation of toxins can impact everyone but especially children, elderly and immune compromised.
 - Loudoun is experiencing an epidemic of Lyme disease – those with Lyme will have a harder time recovering while inhaling polluted air.
 - Horses with current respiratory illness may be further impacted by additional pollution.
 - Air pollution reduces the effectiveness for the bees to locate floral scents and can prevent pollination as well as starve colonies of bees.



3, 2, 1...Impacts

■ VIEWS

- The 220 foot tall smokestacks and smoke will be visible from 15 Appalachian Trail vistas, 3 of which are in Loudoun to include Bear's Den.
- Factory will operate 24/7 which will contribute to light pollution.

■ TRAFFIC

- Rockwool has stated they anticipate 100 trucks per day coming in and out of the facility. We are unsure of the routes they will be taking.
- They have not disclosed where they will be sourcing their materials from and where they will be coming from (rail, truck, quarry, etc)



It's Not a Done Deal...

- 9/18/2018 Jefferson County Vision lawsuit against JCDA
- 10/2/2018 Loudoun County Board of Supervisors votes to request air quality monitors in Western Loudoun county
- 10/22/2018 Jefferson County Vision lawsuit against the JCC for Freedom of Information violation
- 11/2/2018 Jefferson County Vision lawsuit against Rockwool regarding the PILOT agreement being unconstitutional
- 11/7/2018 JCDA delays the water bond vote
- 11/9/2018 12 JCDA members resign

What Can You Do?

AS A COUNCIL:

- Generate a written statement formally opposing the plant.
- Reach out to elected officials –local, state and national –and request an investigation.
- Request Loudoun County monitor pollution levels in air, water and soil.

AS A CITIZEN:

- Spread the word through your social media feeds.
- Join our facebook page: Loudoun Against Rockwool.
- Post signs in your place of business, and offer flyers for patrons to take.
- Assist the Jefferson County Vision legal fund either with fundraisers or direct donations.
- **SAVE THE DATE** to attend the Starry Night Gala on April 13th

Questions?



Stacey Pfaltzgraff

From: Gavin Perry <gavarch@gmail.com>
Sent: Monday, June 15, 2020 3:27 PM
To: Mike Anderson; Stacey Pfaltzgraff; Don Haines; Scott Coulter; Amanda Stroud; Duke Pierson; Gene Taylor; scoulter@cityofransonwv.net
Cc: Gavin Perry
Subject: Objections to Rezoning Jefferson Orchards to Industrial Use- ordinance, #2017-302.
Attachments: White Paper - Mineral Wool Insulation is Not Green Sustainable or Environmentally Friendly 2019-06-09.pdf

CAUTION: External Email

To the Ranson City Council: Dear City Council Members;

My name is Gavin Perry, my family and I have lived in Jefferson County since 1975. I am a retired Architect, LEED Accredited Professional and a member of the Jefferson County Farmland Protection Board and the West Virginia's for Sustainable Development Board. The opinions below are my own and do not reflect the opinions of any organization.

My objections to Rezoning the Jefferson Orchards for industrial use for Rockwool are based on Rockwool's Mineral Wool Insulation product, its manufacturing processes, the location of the factory and its potential damage to the environment and harm to human health.

Mineral Wool Insulation is NOT Green, Sustainable or Environmentally Friendly. Rockwool claims that its insulation products will reduce the energy needed to heat and cool buildings and therefore will reduce greenhouse gas emissions. ALL insulation products do this, but that does not mean we should use them. Asbestos is an excellent insulation material, but it is no longer used because of the damage it causes to human health.

We should think of Mineral Wool Insulation as a similar type of insulation as asbestos. There is no need to manufacture or use mineral wool insulation. There are other insulation products that perform better, cost less and will not damage the environment or harm human health. In summary the reasons NOT to use Mineral Wool Insulation are;

MINERAL WOOL INSULATION HAS:

Higher Embodied Energy from Manufacturing than Cellulose or Fiberglass Insulation;

Higher Toxic Emissions from Manufacturing than Cellulose or Fiberglass Insulation;

Higher Toxic Emissions during Application than Cellulose or Fiberglass Insulation;

The same Fire Rating as Cellulose or Fiberglass Insulation;

Lower Sound Insulation value Cellulose or Fiberglass Insulation;

Lower R-Value than Cellulose or Fiberglass Insulation and

Mineral Wool Insulation Costs More than Cellulose Insulation or Fiberglass Insulation.

The manufacturing process for mineral wool insulation and the location of the Rockwool factory on the Jefferson Orchards site are the greatest reasons NOT to Rezone the current site to industrial use. The Jefferson Orchards site is the worst possible location in Jefferson County for this type of industrial facility.

Because of the local geography, weather patterns, soil conditions, location near schools and communities and the potential damage to the air, water and health of the residents of Jefferson County, you should NOT approve the rezoning application.

I have attached a White Paper that provides specific detailed information on the above summary of my objections. Please read it.

Thank you for your consideration of my opinion.

G.A. Perry, Architect, LEED AP.

WHITE PAPER

Mineral Wool Insulation is Not Green, Sustainable or Environmentally Friendly

G.A. Perry, Architect LEED AP
gavarch@gmail.com
JUNE 2019

The proposed Rockwool factory located in Ranson West Virginia will manufacturer mineral wool insulation for use in the building industry. All insulation saves energy when installed in buildings. Because insulation saves energy it does not mean that all types of insulation are inherently sustainable. The raw material used, the manufacturing process, the emissions and by-products, the use of resources, the environmental and health impacts and the disposal method and reuse of the insulation after its life all have a bearing on the sustainability of the insulation.

Based on the following information and facts the mineral wool insulation to be manufactured by Rockwool in the Ranson factory is not green, sustainable or environmentally friendly.

THE RANSON FACTORY MANUFACTURING PROCESS

Mineral wool is made from stone melted in furnaces. Stone is not a recycled or sustainable material. It is extremely energy-intensive to produce and has high embodied energy. The manufacturing process involves on-site fuel combustion using gas and coal in furnaces, boilers, and dryers. The stone must be melted at very high temperatures and the furnace run 24 hours a day, every day of the year. The Rockwool factory in Ranson will use the following technology and equipment to melt the stone and manufacture the mineral wool insulation:

- **Melt Furnace.** Coal Fired Melt Furnace with Bag House for emissions control.
- **Production Line** (Spinner, Curing, Cooler). Wet Electrostatic Precipitator (WESP) for emissions control.

The factory will process up to 650 tons of raw materials and use up to 93 tons of coal daily. **The stone and coal will be transported to the site in heavy duty trucks.** Based on 120 trucks transporting material to and from the factory, the service vehicles and the 150 employee vehicles which will enter and leave the factory every day, there will be on average 540 vehicles entering and leaving the factory each day, an average of 22.5 trucks or vehicles every hour, every day of the year. **One truck or vehicle will enter or leave the factory every 2.6 minutes, or 156 seconds, 24 hours a day, every day of the year.** The above estimates are only averages; there will be more traffic during peak periods such as shift changes. There will also be school buses and parents dropping off and picking up school children and traffic from local residents on the same road at the same time.

The manufacturing process results in by-products that are hazardous. They are stored on site in containers or lagoons susceptible to leaks and spills and then are transported by road or rail for offsite disposal.

The installation process requires workers to wear full body suits and face masks to protect them from breathing the mineral wool fibers and to protect their eyes and skin from irritation.

Mineral wool is difficult to recycle and has few reuse applications. It does not decompose or breakdown when disposed of in landfills.

THE ENVIRONMENTAL IMPACT OF THE RANSON FACTORY

Air Quality

The 21-story smokestacks are permitted to emit 470 tons of volatile organic compounds (VOC) and 239 tons of nitrogen oxides each year. This will make the Rockwool factory in Jefferson County the second largest VOC

polluter and the tenth Hazardous Fine Particulate Matter (PM 2.5) in the state of West Virginia, based on 2014 EPA NEI data. The dramatic increase of toxic emissions and particulate matter air pollution pose a threat to all residents, particularly the most vulnerable—the children, the elderly, and those with compromised respiratory systems.

The prevailing winds in Jefferson County are from the west, northwest. Ranson, Charles Town, Harpers Ferry and the surrounding areas will receive the greatest amount of pollution from the Rockwool smoke stacks. Shepherdstown will receive less pollution.

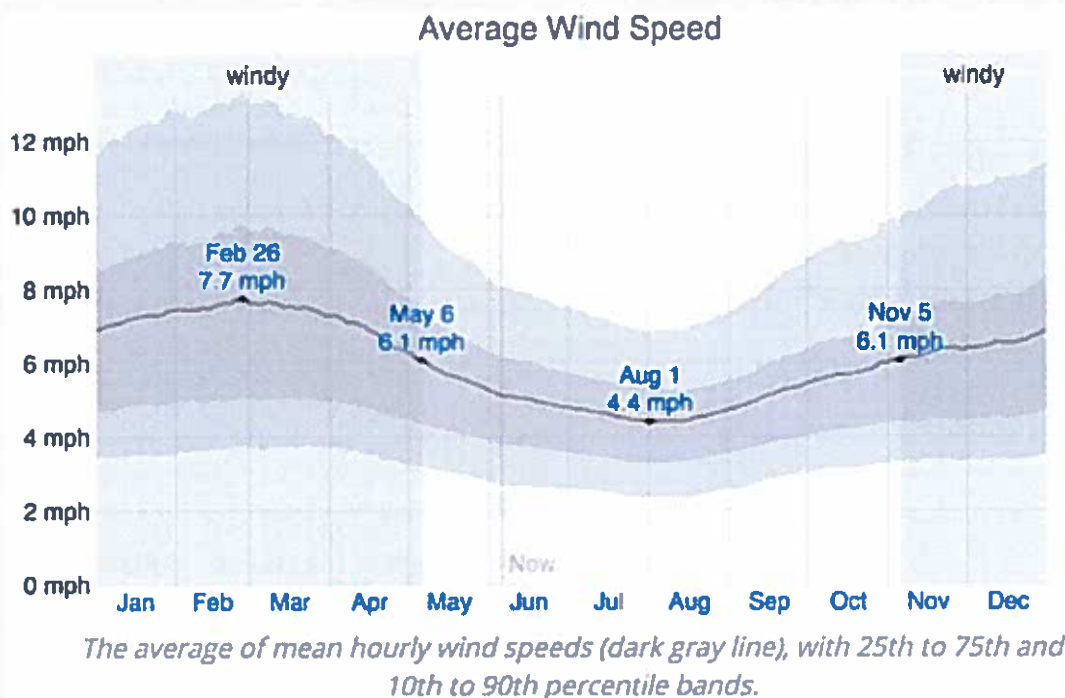
Why Local Weather Matters

David Michael Glenn PhD; the retired director of the USDA-ARS-Appalachian Fruit Research Station, Kearneysville, WV, with over 30 years experience in weather measurement and interpretation, provided the following weather information related to the Rockwool project:

As stated in the Rockwool permit, they will be emitting 471 tons/year of volatile organic compounds (VOC's) and 239 tons/year of nitrogen dioxides (NOx's), the building blocks of ozone, in addition to 154 tons/year of particulate matter. The reason that

this project will construct 210 foot smoke stacks is to use wind currents to dilute and distribute the pollutants off-site.

It is my argument that wind characteristics in the Jefferson county area do not support this strategy and differ significantly from Milton, Ontario and the area near Byhalia, MS where Rockwool has existing and similar plants. The Rockwool plant's plan for mitigation of particulate and gaseous emissions with a 210 foot tall smoke stack is unacceptable to Jefferson county given the wind behavior and prevalence of calm winds for extended periods of time throughout the year.



(Source: <https://weatherspark.com/y/21067/Average-Weather-in-Charles-Town-West-Virginia-United-States-Year-Round>)

In Charles Town, WV, The windier part of the year lasts for 6 months, from November through April, with average wind speeds of approximately 7 miles per hour. The calmer time of year lasts for 6 months, from May through October with average wind speed of approximately 5 mph.

The Effects of Calm Air Events on Particulate Pollution

From 2008 to 2017, 30% of the year had wind speeds less than 3 knots (3.45 mph) which the national Weather Service (NWS) classifies as 'calm' meaning there is no detectable wind motion by the instrumentation. The predominance of still air occurs at night but night or day, the still air provides ample time for particulates to settle to the ground in very close proximity to the site since this plant operates 24/7. Under these conditions, the nearby schools, businesses and homes will experience fallout of the particulate matter ranging from an average of 5 hours to an extreme of 15-20 hours throughout the year.

Ozone pollution is an additional concern. Ozone is a heavy gas and will settle to ground.

During the daylight hours from March to October when light and temperature conditions are adequate for ozone production (8 AM to 6 PM) due to the VOC and NOx emissions, calm air occurs an average of 1.5 hours of each day but calm periods can occur for 6-8 hours. These are conditions typical of the spring frosts, inversions, and hot sultry days that occur in Jefferson county. Calm wind conditions would allow ozone to be generated at the top of the 210 foot tall smoke stack and settle nearby potentially affecting

ozone sensitive groups, children and the elderly as well and further reducing soybean yield in nearby farms due to direct ozone damage.

These data do not support the premise of Rockwool that a 210 foot smokestack will distribute and dilute its emissions with no effect on the populace and businesses of Jefferson County.

Deficiencies of the AERMOD Model of Air Pollution Used by EPA and WVDEP

If you wonder why the WVDEP did not consider these conditions, it is because the AERMOD model of EPA uses hourly data and pools data into average annual events to arrive at average annual emission levels. Details such as extended periods of calm air are masked by the pooling protocol required by the AERMOD model. The 'devil is in the details' and those details are a critical issue in the acceptance of the Rockwool plant into the community of Jefferson County. There is no 'average' person and no 'average' day, month or year. It is the unique characteristics of each day that will determine the effect of Rockwool's emissions on the businesses and population of Jefferson County. The fact that the WVDEP is unable to model to such a fine level of detail does not dismiss the fact that extended calm periods will have an effect in Jefferson County.

It is my argument that the Rockwool plant's plan for mitigation of particulate and gaseous emissions with a 210 foot tall smoke stack is unacceptable to Jefferson County given the wind behavior and prevalence of calm winds for extended periods of time throughout the year.

Rockwool emissions rank 6th highest out of 2,093 in the industry

The screenshot shows the EPA mobile website interface. The main heading is 'FACILITY REPORT' for 'ROXUL USA INC'. Below this, it lists the Toxic Release Inventory ID, address, and industry. The 'CONTEXT' section is visible, with a red box highlighting the following text: 'National Ranks 6 out of 2093 TRI facilities in Industry: Nonmetallic Mineral Product (Rank 1 = highest releases)'. A red arrow points from the text on the left to this box.

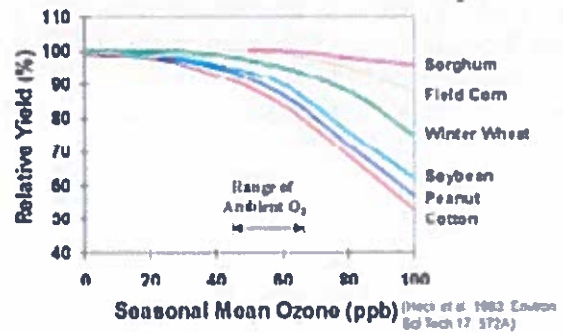
Farming, Agriculture and Orchards

The increased pollution will impact the natural environment, including the land, agriculture and vegetation. Retired director of the USDA-ARS-Appalachian Fruit Research Station, Kearneysville, WV; David Michael Glenn PhD cites peer reviewed literature that increased ozone levels from Rockwool could reduce crop yields for soybeans by up to 50%, winter wheat by 25% and corn by 10%. Rockwool could harm livestock and cattle, particularly horses, which are 15 times more sensitive to particulate matter pollutants in the air than humans, according to a new study published in the journal of Veterinary Internal Medicine. Pollination by bees, which is critical to local orchards, will be impacted because of the environmental problems and loss of habitat resulting from the construction and operation of the factory.



Ozone damage on soybeans (<https://www.ars.usda.gov/southeast-area/raleigh-nc/plant-science-research/docs/climate-changeair-quality-laboratory/ozone-effects-on-plants/>)

Effect of Ozone on Yield of Crops

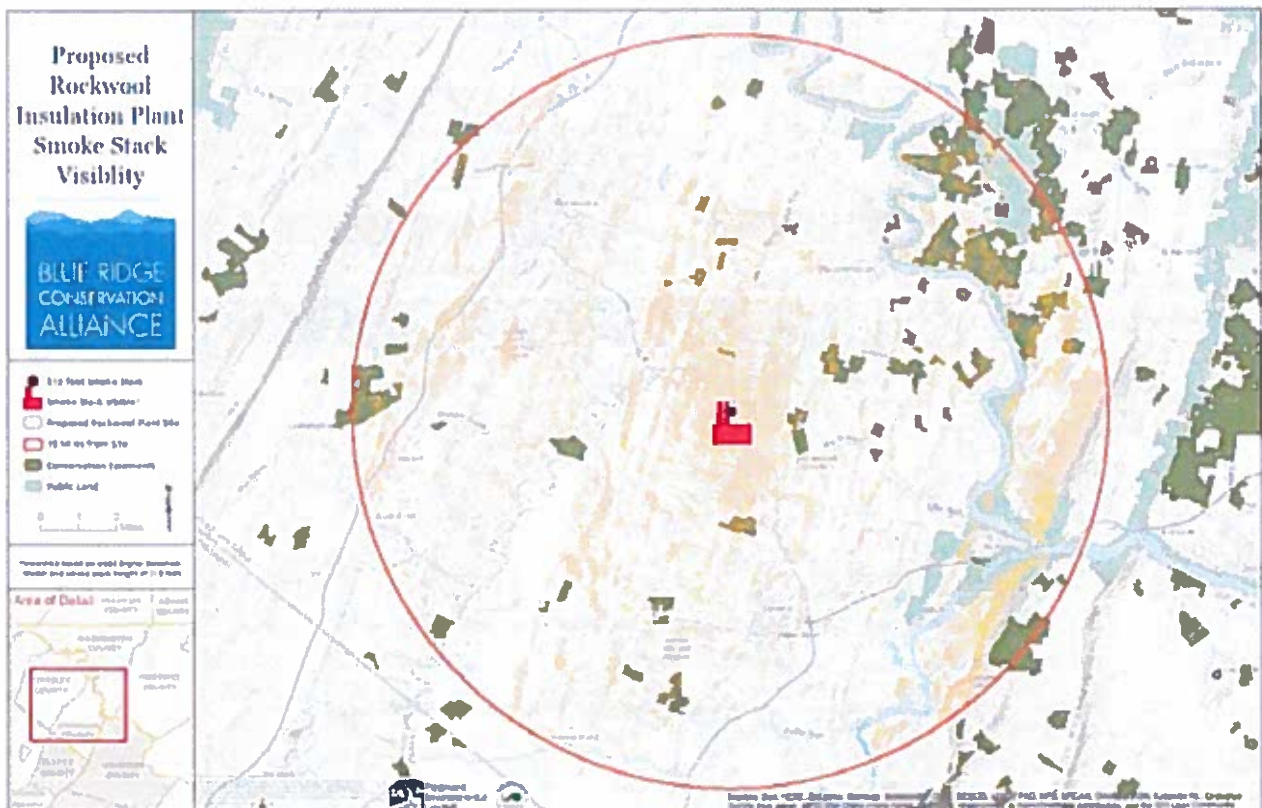


Noise and Light Pollution

The factory will operate twenty four hours a day, every day of the year. It will create increased noise and light pollution for the residents, schools and businesses located within sight and hearing distance from the factory. The large number of heavy duty trucks, some carrying loads of coal, stone, and potentially natural gas, entering and leaving the factory twenty four hours a day, will also dramatically increase noise pollution for local residents.

Visual Pollution

The Rockwool factory is located in close proximity to eleven structures listed or eligible for the National Register of Historic Place, according to the Jefferson County Historic Landmark Commission. The sight of the two 213 foot high smoke stacks, their lights and the emissions



coming from them will negatively impact the views to and from local historic battlefields of Antietam and Shepherdstown, Harpers Ferry National Park, the Appalachian Trail as well as views of the first ridge of the Blue Ridge Mountains.

The smoke stacks will be visible from every corner Jefferson County, including public lands and properties in conservation easement, many funded by the American Battlefield Protection Program

Water Supply and River Pollution

The Rockwool factory is located in the Chesapeake Bay watershed and the Shenandoah River flows into the Potomac River which then flows into the Chesapeake Bay. **Storm water runoff, outside factory spills and overflows from the above ground lagoons from the Rockwool factory will flow into Rocky Marsh Run which flows into the Potomac River.** Communities, both locally and those down river from Rocky Marsh Run which depend on drinking water from the Potomac River could be impacted by the release of contaminants from the factory, potentially impacting the health of the river and the safety of the public water supply. Rocky Marsh Run is also in the Shepherdstown water supply watershed. The City of Shepherdstown pulls water from the Potomac River just after Rocky Marsh Run enters the river.

According to Rockwool’s application for a West Virginia national pollutant discharge elimination system water

pollution control permit modification, dated November 1, 2018, non-domestic wastewater from Rockwool at the Charles Town's main wastewater treatment plant for ultimate treatment and discharge through Outlet 001, will feed into Evitt's Run, a tributary Shenandoah River of the Potomac River.

The Corporation of Harpers Ferry at its August 31, 2018 meeting was particularly concerned about what it has identified as a PSSC – “Potential Source for Significant Contamination” to the Harpers Ferry water supply. Elks Run and its tributary the Elk Branch, are the main sources of drinking water for residents of Harpers Ferry, Bolivar, adjacent county customers, and the National Park Service. This watershed area is of critical concern and requires detailed scrutiny due to the proximity of the Rockwool plant to the Harpers Ferry surface water intake and the intake's susceptibility to potential contaminants.

Underground Water Supply, Wells, Springs, and Sink Holes

Water for 80% of Jefferson County residents, businesses and farms is obtained from private wells. The April 2, 2012 report, “County-Wide Groundwater Assessment Jefferson County, West Virginia” states that there are approximately 15,500+ wells in the county. The study also noted that there are areas of Jefferson County that are abundant with groundwater and also that demonstrate robust recharge. The report indicates that groundwater levels are affected by rainfall quantities, temperature and

Any chemical introduced into the groundwater near the Rockwool Factory will contaminant the water of the northern part of the county



Proposed Rockwool Site

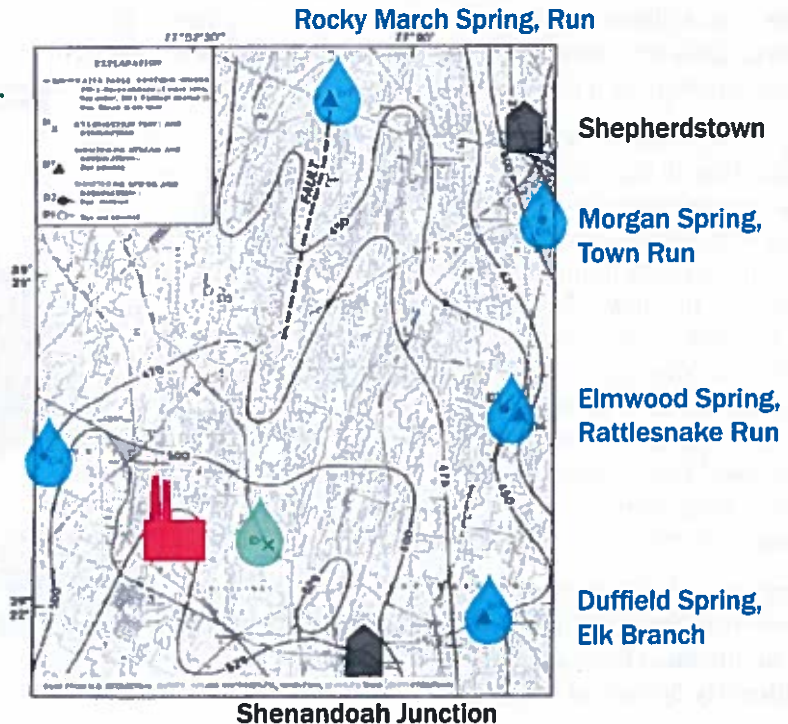


Initial dye injection point



Dye detected weeks later

After the intial injection, dye was detected 2 weeks later at Rocky Marsh. It takes 25 weeks to clear from all locations.



Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

usage. According to Mary T. Sell of the Jefferson County Water Advisory Committee, the document is full of information about the availability of groundwater in the County to help inform decisions on how to best utilize and protect this critical natural resource in our County. The Assessment was prepared for the Jefferson County Commission.

Colin Stine, of Elmwood Farm has expressed concerns about the study's findings. He states that the models used to determine whether there is sufficient water is a generalized model which works 95% of the time. However he thinks that **it does not emphasize the importance of karst, and Jefferson County is primarily karst.** Therefore the models for water that were used are likely to be inaccurate. The most recent map of wells in the county was done in 2012 and includes less than 10% (~950) of the 15,000+ wells in the county. Ground water streams and wells need to be mapped before accurate models can be produced. The assessment also does not report on the groundwater dye experiments done for USGS. The assessment does not do justice to our karst system. **Sinkholes in Jefferson County have direct connections to the groundwater and the groundwater flows rapidly in karst (limestone).**

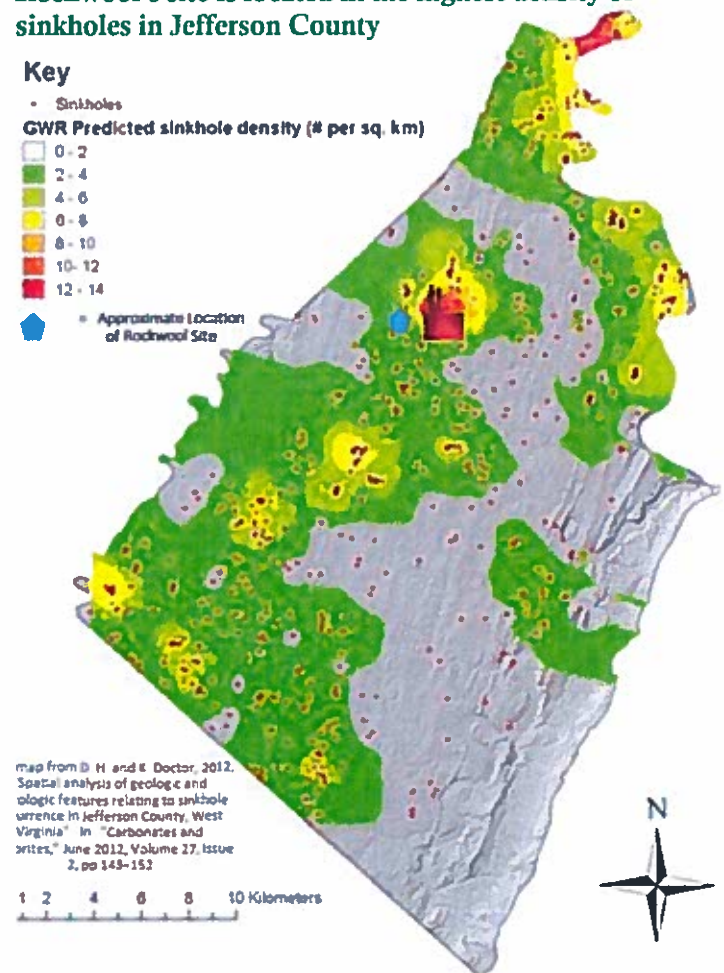
The location of the Rockwool factory, the sinkholes in Jefferson County and the local hydrology raises the possibility of pollutants entering the groundwater and contaminating wells and springs. A spill or leaking sewer line could result in health and safety issues as the contaminated material moves underground rapidly and is difficult to track and to clean up. According to maps by D.H. and K. Doctor in "Carbonates and Evaporates", June 2012, Vol 27, Issue 2, **the highest concentration of sinkholes in Jefferson County is located adjacent to the proposed Rockwool site.** The factory site is also located at the headwaters of a number of County streams.

In the 1990s, a county study injected dye into a well near Bardane in the Elk Run watershed and within less than two weeks the dye was also found in Rocky Marsh Spring, which feeds Rocky March Run, almost 8 miles away. The dye also found its way to the Morgan Spring, which feeds the Town Run, Elmwood Spring, which feeds Rattlesnake Run and the Duffield Spring- Elk Branch. The dye moved rapidly underground over a large landscape and took 25 weeks to clear from all locations. (Kozar, M. D., et al., 1990. Geohydrology, Water Availability, and Water Quality of Jefferson County, West Virginia, with Emphasis on the Carbonate Area. U.S. Geological Survey, Water-Resources Report 90-4118).

According to Colin Stine, whose family has lived and farmed in Jefferson County since the 1940s, the water flow on his farm from the underground aquifer has significantly decreased in the past 30 years. The farm

has five permanent springs, three seasonal springs and Rattlesnake run which flows through the center of the property. During the last ten years three of the permanent springs have gone dry in the fall, if the season is dry enough. In 1999 a portion of the Run which passes through the farm went dry for the first time. Since then a portion the Run has gone dry during the fall in most years and in the past decade has gone dry every year, except in 2018. A portion of the Run goes dry because of an estevale in the stream in the middle of the farm. An estevale is a form of sinkhole with a dual function. It either discharges water as a spring or allows water to sink into the aquifer, depending on the groundwater conditions. The water problems of the Run on the farm have not yet affected the downstream water flow because there is one spring that has never gone dry and the Run is fed by other water sources. Another local farmer also reported that the Run through his property went dry because a sink hole opened up on the bank of the stream and all the water flowed into the sink hole. The water flow in the Run was restored once the bank was rebuilt. Also In 1999, "Elmwood Farm Spring" which is usually eight inches deep in the spring house, was down to about two inches deep. Thus the potential further lowering of the water table would cause that spring to go dry and affect the downstream water flow in the Run.

Rockwool's site is located in the highest density of sinkholes in Jefferson County



Streams, Wetlands, and Rare Marl Marshes

Rockwool proposes to withdraw 125 thousand gallons of water per day initially and then up to 500 thousand gallons of water per day. The internal underground drainage systems in karst areas are very sensitive to extraction. Removing this quantity of water from the aquifers can have very serious and unpredictable adverse consequences. Lowering of water tables can affect the hydrologic equilibrium of local streams as well as wetlands, including rare marl marshes, at substantial distances from the point of extraction. The potential impact is loss of critical wetland and riparian habitat for threatened and endangered species of plants and other forms of wildlife.

Location of Rockwool site relative to headwaters of streams in Jefferson County.

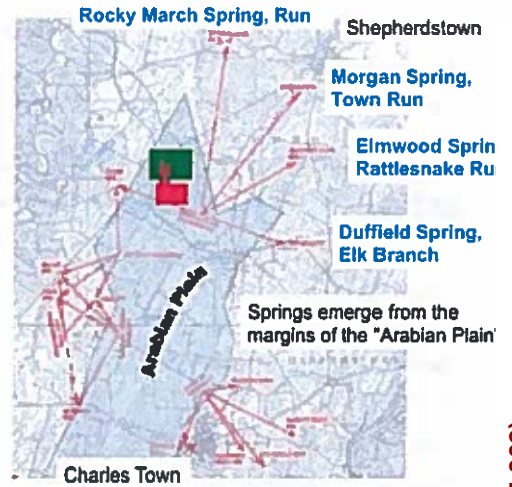
Base Map from Figure 4 of 2012 Report: "County-Wide Groundwater Assessment of Jefferson County, West Virginia" by Analytical Services, Inc.

 = Approximate Location of Rockwool Site



Water Pollution in the Arabian Plain impacts most of the county

 Proposed Rockwool Site
 Highest density of sinkholes in the county
 Small red arrows indicate rapid flow away from Arabian Plain to springs that feed our streams



Endangered, Threatened, and Rare Species

In Jefferson County twenty-seven rare species live in the marl marshes. There is also one federally-listed Threatened Species: the Madison Cave Isopod, a small crustacean that lives in groundwater and has been documented in three locations, including two sites near the Rockwool factory. The WVDNR identifies several "High Quality and State Mussel Streams" including Evitts Run, Bullskin Run, Elks Run, and Long Marsh Run. The USFWS and the WVDNR also maintain lists of species of concern which includes the Baltimore Checker spot butterfly and Sedge Wren.

Migratory Birds

Jefferson County is positioned on the Atlantic Flyway and immediately to the east of the Allegheny Front. Many migrating birds take advantage of the winds from the mountains and ridges of the Appalachian range to mitigate the challenges to their biennial long-distance flights. Migratory birds are protected under the Migratory Bird Treaty Act, which not only protects the birds themselves but also sets stipulations to protect habitats necessary for the birds' survival. According to Suzanne Offutt, Board President of the Potomac Valley Audubon



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Society air emissions from the Rockwool factory, especially particulate matter, will create hazards to migrating birds using the Atlantic Flyway.

CELLULOUS INSULATION: A SUSTAINABLE ALTERNATIVE TO MINERAL WOOL

Insulation is one of the most significant components of a building. In terms of volume it accounts for more than 50% of the building structure. It has the ability to significantly influence the performance of a building that goes beyond energy efficiency and heat loss.

Cellulose is a basic part of plants. Its fibers make up the pulp that is spread into sheets, pressed and dried to create paper. After the paper has been used, the plant fibers can be woven together to create a strong, durable material called cellulose insulation.

Cellulose insulation has up to 85% recycled content and contains no formaldehyde or asbestos. The remaining 15% is composed of natural fire retardants and anti-fungal agents such as boric acid and ammonium sulfate. Fiberglass has an average of up to 50% percent recycled content.

Cellulose insulation has a very low embodied energy and is manufactured using **approximately 5 times less energy than is required for the manufacture of other insulation materials.** (1)

The cellulose manufacturing process involves fiberizing recycled paper to produce the insulation. It is a dry process driven by electric motors. The motors are powered by electricity from utility companies that supply the grid. The manufacturing process does not involve on-site fuel combustion in boilers, furnaces, or dryers or the on-site use of gas or coal. The cellulose production process also results in energy savings as it is shut down at the conclusion of a production day.

Mineral wool is extremely energy-intensive to produce. Stone must be melted at very high temperatures using gas and coal furnaces to turn the stone into the candy floss-like material. The furnaces run day and night, seven days a week.

The mineral wool manufacturing process releases greenhouse gases and volatile organic compounds (VOCs) which includes six known or suspected cancer causing chemicals: Acetaldehyde, Formaldehyde, Biphenyl, 1,3-Butadiene, Naphthalene and Benzene. Hazardous Fine Particulate Matter (PM 2.5) is also released during the manufacture of mineral wool insulation.

Cellulose insulation outperforms other types of insulation in R-Value, acoustical and fire properties, energy use, sustainability and the protection of human health and the environment. The advantages of cellulose insulation are:

The Best Thermal Insulation Values

Cellulose insulation has an R-Value of 3.7 per inch; mineral wool which has an R-Value of 3.0 to 3.3 per inch and Fiberglass has an R-Value of 2.2 to 2.7 per inch, according to the US Department of Energy. **Cellulose insulation provides 17.5% more insulation than mineral wool, based on an average R-Value of 3.15 form mineral wool**

R-Value stands for "Resistance-Value," and the number after the R tells how well a material keeps heat from flowing through it. The higher the R-Value, the greater the insulation power. Studies show cellulose insulation can save up to 22% in energy costs compared to other types of insulation. (2), (3).

Cellulose insulation is a densely packed insulation and is installed pneumatically resulting in no settling, voids or thermal bridges. It completely fills the gaps and voids around irregular objects such as wiring, plumbing and framing materials. Mineral wool or fiberglass insulation does not fill all the gaps or voids.

Water Usage and Disposal

The cellulose insulation manufacturing process **does not use large quantities of water** and the waste fluids are not discharged into waste water or storm drains systems.

Optimum Sound Insulation

Cellulose insulation provides up to 7 dB more sound insulation than conventional fiberglass in partition walls. (4)

Maximum Resistance to Fire

Cellulose insulation has a Class 1 fire rating and is up to 57% better at resisting fire than other types of insulation. Cellulose insulation is **treated to make it flame retardant.** Other forms of insulation do not contain active fire-resistant materials. In addition, its density is two to three times greater than fiberglass, and **qualifies as a fire-blocking material.** In a large-scale fire test it lasted 68 minutes – 60% longer than fiberglass batt insulation (5).

Moisture Control

High-density cellulose helps prevent airborne moisture movement, improving building durability and longevity. Cellulose disperses moisture and helps to protect the surrounding building components.

It has the ability to store and release moisture without loss of its insulating properties.

Does Not Promote Mold, Mildew or Fungal Growth

Cellulose insulation installed properly and maintained will be good for decades of excellent performance. It will not promote mold growth and meets the ASTM C-739, the industry standard for fungal resistance.

Versatile Insulation and Availability

Cellulose insulation can be used in a variety of ways, e.g. the insulation of sloping roofs, top floor ceilings and walls or as insulation for buffer tanks, installation shafts, and vaulted ceilings and as visible spray-on acoustic insulation.

Cellulose insulation is extremely safe to handle and install. It contains no formaldehyde, glass fibers, asbestos, Chlorofluorocarbons (CFCs), Hydro fluorocarbons (HFC), or Hydro chlorofluorocarbons (HCFCs). There are no health risks such as cancer related warnings associated with its installation. It does not irritate skin or itch as does mineral wool and fiberglass insulation

Cellulose insulation can be purchased through a variety of retail channels - through big box retailers like Lowes and Home Depot, and also through companies like 84 Lumber, as well as through buy group co-ops and distributors like Do It Best, Cameron Ashley Building Products and True Value, among others.

Sustainability

All types of insulation saves energy in operation but that does not mean they are all sustainable. The impact of insulation manufacture processes, use of resources and environment and health, to name a few, all have a bearing on sustainability. **Cellulose insulation has the capacity to be the most sustainable raw materials used in construction.** It absorbs carbon dioxide during growth and locks it up in the insulation material during service. It contains waste fibers or lower value fibers that would otherwise go to waste. As building standards require greater levels of thermal insulation, the environmental impact of the materials we use, in particular insulation, cannot be underestimated.

Recyclable and Compostable

Cellulose insulation is a wood fiber product which naturally breaks down after its useful life and leaves non-toxic biodegradable materials, unlike mineral wool or fiberglass. The typical life span for cellulose insulation is 20 to 30 years.

Sources and References

The Alliance for Sustainable Building Products (ASBP), London, UK

US Green Fiber LLC, Charlotte NC, USA

Thermo Cell Industries, Ontario, Canada

Ms. Signe Sand, Architect, Denmark

Information Newspaper, Denmark

1 - Comparison is based on an R-30 value at one square foot coverage area. The comparison includes the production and energy used in the insulation manufacturing process and is based on Sustainability Impact Index prepared by Principal Partners.

2 - Based on a University of Colorado study (1990) comparing cellulose and fiberglass batt insulation in identical structures during the winter season.

3 - According to Brookhaven National Laboratory Study comparing fiberglass batt to blow-in cellulose insulation and an Oak Ridge National Laboratory Study (1991), comparing fiberglass loose fill insulation to blow-in cellulose insulation.

4 - Based on STC ratings on complete assemblies using staggered drywall construction with Wall Spray Cellulose Insulation. Architectural Testing, Inc., Report No. A2954.01-113-11

5 - As demonstrated by The Large Scale Outdoor Fire Test Program comparing the fire performance of three structures: (1) an uninsulated structure; (2) a structure insulated with fiberglass batt (wall cavities) and blown-in, loose fill insulation (attic floor); and (3) a structure insulated with cellulose insulation using spray applied cellulose insulation (wall cavities) and blown-in, loose-fill cellulose insulation (attic floor) - Prepared by Steven Winter Associates Inc

FACT SHEET

The Disadvantages of Mineral Wool Insulation

G.A. Perry, Architect LEED AP
gavarch@gmail.com
JUNE 2019

The following information is from *INSULATION RECOMMENDATIONS - A Quick Guide to Cost, Health, and Environmental Considerations*, by BuildingGreen, Inc. The content for this report is excerpted from "Insulation Choices: What You Need to Know about Performance, Cost, Health and Environmental Considerations," which is available through BuildingGreen.com. The full report contains detailed guidance on pros and cons of each insulation type, as well as essential background on using insulation in buildings.

Do Not Use Mineral Wool! It has...

1. **Higher Embodied Energy** from Manufacturing than Cellulose or Fiberglass Insulation;
2. **Higher Toxic Emissions from Manufacturing** than Cellulose or Fiberglass Insulation;
3. **Higher Toxic Emissions during Application** than Cellulose or Fiberglass Insulation;
4. **Lower R-Value** than Cellulose or Fiberglass Insulation and
5. **Higher Costs** than Cellulose Insulation or Fiberglass Insulation.

Insulation	Type	R-Value	Installed Cost Per	Installed Cost Per	Environmental Notes
			Foot for R-19 <i>Low End</i>	Foot for R-19 <i>High End</i>	
Cellulose	Spray	3.8 - 3.9	\$0.73	\$1.59	High recycled content. Low embodied Energy. Low toxic emissions during application. Low Toxic emissions during manufacture.
	Loose fill	3.6 - 3.7	\$0.64	\$0.80	
Fiberglass	Batt	3.3	\$0.88	\$1.88	Low recycled content. High embodied Energy. Formaldehyde binders. Toxic emissions during manufacture.
	Blown-in	3.8	\$0.66	\$0.83	
	Spray	3.7 - 4.2	\$0.60	\$0.79	
Mineral Wool		3.3	\$1.20	\$1.44	Low recycled content. High embodied Energy. Toxic emissions during application. High toxic emissions during manufacture.

R-Value ranges reflect the variability of products, and for some spray-applied products, a range of installed densities.

Installed Cost estimates are provided by Vermeulens Cost Estimating and Davis Langdon, and are intended to be relevant throughout the U.S. Specific project conditions may affect costs, such as scale, scope, new vs. retrofit, or

Stacey Pfaltzgraff

From: Gavin Perry <gavarch@gmail.com>
Sent: Monday, June 15, 2020 11:19 AM
To: Stacey Pfaltzgraff; Duke Pierson; Gene Taylor; Don Haines; Scott Coulter; Mike Anderson; Amanda Stroud; Gavin Perry
Subject: Ranson Town Council
Attachments: cidB5E228F4-CF4A-423D-ABB9-8AD8EE998260.jpg; cid96179202-371D-4916-9675-2B6D9CEC684F.jpg; cid32E75FBA-571E-4A5B-934F-AD8F5A115E43.jpg

CAUTION: External Email

----- Forwarded message -----

From: Pam Parziale <pamo.ren2@gmail.com>
Date: Sun, Jun 14, 2020, 5:04 PM
Subject: Ranson Town Council
To: Gavin Perry <gavarch@gmail.com>, <lbdelles@gmail.com>, <progressiveconfluence@gmail.com>

To whom it may concern,

I served on Envision Jefferson 2035, a 15 member steering committee for the Jefferson County Comprehensive Plan. We met from 2012 to 2014. We had clear goals and responsibilities, as set forth by WV state law *8A-3-1. We concluded with a recommended list of priorities.

It reviewing the Ranson Comprehensive Plan, looking at the maps, rereading testimony to the Envision Committee, and reading my notes, the proposed Rockwool plant was not a part of the Ranson Comprehensive Plan.

<https://www.cityofransonwv.net/DocumentCenter/View/35/2012-Comprehensive-Plan>

Because of the actions taken by the Ranson City Council to short circuit the legal process and to allow Rockwool to proceed with its development, Ranson is now required by the courts to hold the necessary readings as required by state law. Most important, the City of Ranson, its town council and planning commission, did not follow its own master plan for Ranson. Their hasty actions and decision making are an insult to the memory of Ranson Mayor Hamill who served the city for 29 years and strongly supported the multi-use development in the area of Jefferson Orchards.

Looking at the map of the Ranson area, (attached) one sees a large white space. This is the area of Jefferson Orchards, now owned by Rockwool. As the Envision Committee met, monthly meetings over the course of almost 3 years, informational meetings of all kinds about the county's resources and future growth, this particular area was to be an urban center, shops and store fronts with apartments above, housing, and a stop for the MARC train. While not county land, the Envision Committee followed the Ranson Comprehensive Plan and made recommendations for the use of the property consistent with the master plan.

The decision made by Ranson officials to go after a large industry changed the original vision of the City of Ranson, and it is now apparent the city officials mis-represented their future plans made to the Envision Committee.

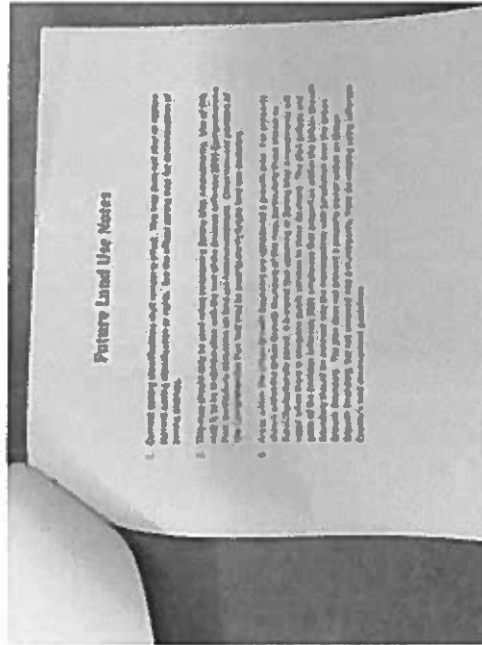


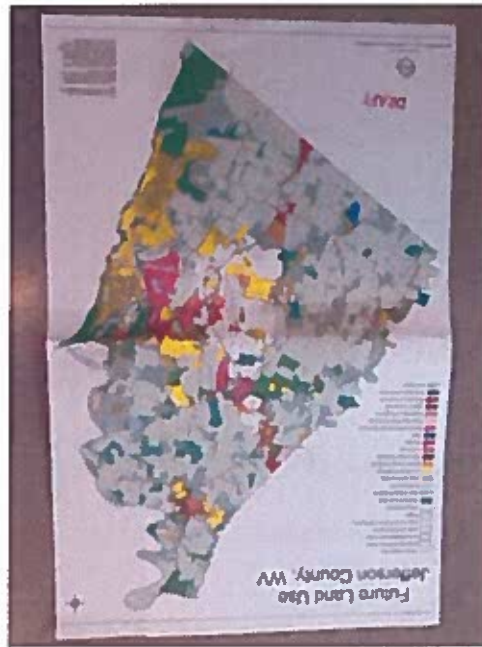
Because of these failings made in 2017, I request that the Ranson City Council vote NO on ordinance # 2017-302.

Respectfully,
Pam Parziale
111 Owls Nest Lane
Kearneysville WV 25430

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)







Stacey Pfaltzgraff

From: pat phillips <paphillips321@gmail.com>
Sent: Friday, June 12, 2020 2:20 PM
To: Stacey Pfaltzgraff
Subject: Objection to the rezoning for industrialization in Ranson, WV (2017-302)

CAUTION: External Email

Pat Phillips

3034 Bakerton Rd.

Harpers Ferry, WV 25424

Objection to the rezoning for industrialization in Ranson, WV (2017-302)

I am writing to voice my concern on the rezoning of land from the Jefferson Orchards, to Ranson, Jefferson County, West Virginia. This rezoning was initiated and completed in secrecy from Jefferson County residents by the Town of Ranson for the sole purpose of bringing in a noxious, highly polluting, foreign, heavy industrial factory, Rockwool. The secret "Project Shuttle" deal of rezoning to allow foreign industry in to the community, in reality is counter-productive to Jefferson County's economic progress and growth, health of its citizens, and does not provide any of the benefits that the original 2012 comprehensive plan for Ranson would have provided. I object to this rezoning as it was completed against county resident knowledge, and later, when Rockwool was revealed, the wishes of the majority of Jefferson Counties residents.

Ranson's initial 2012 Comprehensive plan could have been one giant step in bringing prosperity and future economic growth and needed infrastructure to this area. **Progress is possible only in areas when residents are happy in their environment. It's all about place, a place to call home, place and quality of life matters.** We in Jefferson county still need proper cell and internet coverage, decent shopping, the MARC station, social and cultural resources, i.e. a movie theater if this area is to thrive. Heavy industry drives future business away from having these amenities. The 2012 comprehensive plan endorses 100 year growth plan, whereas the implementation of zoning industrial will stifle any new progressive development.

Why was the 2012 Ranson comprehensive plan that so many worked on and agreed to it's concepts just thrown out the window and not implemented? Who in this county, with the threat of Rockwool, will adequately protect the citizens against air emissions, potential devastation to our groundwater, our health, dropped property values, lack of tourism, the health of the equine industry, inability to farm organically and lack of potential smart growth in this county? Who will provide for the interests of our residents?

The rezoning of Jefferson Orchard has led to the complete upset of the local Jefferson County Development Authority, (JCDA) with half of the members resigning once it was revealed that Rockwool was moving in. The rezoning was the lead cause of death threats to the former Mayor of Charles Town, Mayor Scott Rogers, which in turn, for his and his family's safety, have moved out of state. The rezoning has caused the Jefferson Board of Education, (BOE) to fight lawsuits to try to regain this property. The rezoning has caused the Jefferson County Commission, (JCC) many hundreds of hours of unproductive time and money dealing with the aftermath. In short, most of local governments have devoted thousands of unproductive hours and money dealing with the results of this bad decision.

Many children in schools and daycare near the vicinity of this factory are endangered and are at risk for contracting asthma, allergies and upper respiratory infection and other diseases. Farmers in close proximity must worry about harm to their livestock and produce as labeling as organic would not be feasible.

Jefferson County is special in so many ways. We have the highest standing of college graduates in the state as well as the highest tourism revenue in the state. JC is a weekend getaway for the DC-Baltimore area and a destination for history buffs and outdoor enthusiasts, sightseers, casino goers, and a great place to retire. Rockwool emissions and smoke stacks will severely harm our tourism industry. Who will want to come here for recreation or to purchase a house in an area that emits 392 tons of toxins 24/7/365? Many concerned residents have already moved away.

In short, rezoning land for inappropriate use, i.e. Rockwool will destroy the Eastern Panhandle and will drive people away. **What happened to working together for the future of our community?** No county authority should act without the acknowledgment and opinion of their taxpayers. This rezoning will place severe negative effects on every citizen and every entity in the county and surrounding area. Do the right thing and revoke the rezoning!

Stacey Pfaltzgraff

From: Mark Pickens <mwpickens@gmail.com>
Sent: Sunday, June 14, 2020 11:44 AM
To: Stacey Pfaltzgraff
Subject: Rockwool

CAUTION: External Email

As a neighbor of Ranson, just a few miles away in the part of Frederick County that will be downwind, I am writing to urge the Ranson City Council to reject the proposed ordinance to rezone for Special District Industrial.

What you do locally has ripple effects that affect your neighbors and fellow Americans. It also affects our perception of Ranson, as we look from a (small) distance.

Your choices also have ripple effects across time, affecting your children and grandchildren. Surely whatever gains rockwool claims to offer today aren't worth lifetimes of pollution and illness.

Best regards,
Mark Pickens
Point of Rocks, MD

Stacey Pfaltzgraff

From: Van Pinnix III <Vlp3@me.com>
Sent: Sunday, June 14, 2020 7:45 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on #2017-302. The air emissions, possibility of ground and surface water contamination, and their effect on our interwoven economies threaten the health, safety and welfare of not just Jefferson County but the greater region, including Loudoun and the greater Northern Virginia area.

This zoning would provide for industry that produces large amounts of air emissions. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. Northern Virginia is directly downwind from these emissions. Much of the gaseous, fine particulate, and hazardous emissions can reach Northern Virginia. Further affecting the outdoor air quality of the adjacent portion of Virginia and the ability of these areas to achieve and maintain National Ambient Air Quality Standards (NAAQS) attainment. This will affect agriculture and outdoor leisure and recreation.

For example, Loudoun County has been in nonattainment for the NAAQS 8-hour Ozone standard for the past two years. VOC and NO_x react after they have been emitted to produce ground level ozone. The industry that this rezoning would provide for would produce large amounts of these emissions. This would make it even harder as Loudoun County tries to achieve attainment. As time goes on and the scientific research advances our knowledge and understanding of the extent to which gaseous, particulate and hazardous emissions affect human health the NAAQS standards are likely to be reduced. The effects on air emission from this rezoning will make it only harder for Loudoun and Northern Virginia to meet these standards.

In addition to the concerns about the air, the possible ground and surface water contamination is very concerning to Loudoun and Virginia residents. The site is known to have ground water that is vulnerable to contamination due to the karst hydrogeology. A USGS study demonstrated that the ground water adjacent to the site to be rezoned communicates readily with surface water tributaries of the Potomac River. In addition to direct infiltration where water moves directly from the surface to groundwater via porous limestone bedrock, karst is known to have severe ground instability problems. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater. This makes the aquifer vulnerability in karst areas very high, and contamination with industrial activity such as that provided for by this rezoning too likely.

Loudoun sources its drinking water from the Potomac River, downstream of many West Virginia tributaries that carry water from the epikarst and groundwater aquifer at the site to be rezoned. Loudoun has recently completed the new Trap Rock Water Treatment facility, which draws water from the Potomac River. Loudoun currently provides 40 million gallons and projects to provide 90 million gallons of drinking water a day to customers by 2040 (https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fLoudounwater.org&c=E,1,OQe4zgikvb6KBqJN_u5a981ZOjmyj)

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

bPgn3m6elbFyLHLd-q5_56z34uTY0x3BPh67YpkKdPuVpPVJ13WSx7iu79ZrQlJMDmFi2i7WGtw99z&typo=1). Therefore, the viability of the Potomac River is a high priority for Virginia residents.

Loudoun and Northern Virginia is one of the fastest growing communities in the country and provides a lot to Jefferson County in their symbiotic relationship. Virginia residents support and enjoy Jefferson County through tourism, as our residents enjoy the natural and historical resources of your county. Virginia residents and businesses support the equine industry in a multitude of ways from providing wagering fans at the races to the Virginia Breeders Association Virginia Certified incentive programs and a strong market for retired racehorses. According to an economic impact study from WVU, at least 40% of Jefferson County residents travel outside of West Virginia for work, a good percentage of those travel to northern Virginia. This rezoning would allow for industry that would negatively affect the economy of both places and this relationship and the benefits for our residents gleaned from it.

This zoning change will provide for industry that will negatively effect the health safety and welfare of the Loudon and Northern Virginia community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,
Van L Pinnix, III

--
Van Pinnix III
Vlp3@me.com
Leesburg 20175

Stacey Pfaltzgraff

From: Cheryl Pullen <ccpullen@verizon.net>
Sent: Tuesday, June 16, 2020 9:03 PM
To: Stacey Pfaltzgraff
Cc: Duke Pierson; Gene Taylor; Don Haines; Scott Coulter; scoulter@cityofransonwv.net; Mike Anderson; Amanda Stroud
Subject: Ordinance #2017-302
Attachments: Comments Ordinance, #2017-302.docx

CAUTION: External Email

June 16, 2020

Keith D. Pierson, Mayor - dpierson@ransonwv.us
 Gene Taylor, At-Large Council - gtaylor@ransonwv.us
 David Cheshire, At-Large Council - none
 Donnie Haines, Second Ward Council - donhainessr@gmail.com
 Scott Coulter, First Ward Council - scoulter@frontiernet.net ; scoulter@cityofransonwv.net
 Mike Anderson, Third Ward Council. - andersonant5@aol.com
 Amanda Stroud, At-Large Council. - astroud@ransonwv.us

Dear Mayor and Ranson Town Council Members:

RE: Ordinance #2017-302.

It's imperative that you vote no on Ordinance #2017-302.

I wrote this letter yesterday and let it sit overnight as I often do with important writings so that I can see my errors more easily. However, in yesterday's recovery of the document after accidentally erasing everything following Reference 1 just as I thought I was done, I caught three words in that reference that did not stand out to me when I first chose that article and another while doing a quick search for shorter references. These are the words that came to me again and again during the evening, as I was getting ready for bed, and again this morning: "*the strong moral imperative.*" These are the words that need to drive decisions which will impact many now and for years and perhaps generations to come. These are words used in the article in connection with children's health. Those of us who are parents would or will do almost anything to ensure our children's well-being and happiness. Those of us who are grandparents are equally committed to grandchildren as we are our children. Those of us who believe we should love others as we love ourselves are also held to a standard. The words, "*the strong moral imperative,*" speak loudly and forcefully. I do not envy you in the decision you must make and the burden you must carry for all your life if you later regret your vote. I am counting on you, as many others are counting on you, to make the right decision.

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Furthermore, having listened to tonight's council meeting in regard to the importance of Ranson's Comprehensive Plan, I would like to call your attention to page 37 of that plan. "Encourage manufacturing and assembly line facilities to locate in Ranson. The city will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect health, safety, or welfare of the community. My underlining added. It does not say the Federal Government or the State will ensure the industrial facilities do not adversely affect health, safety, or welfare of the community. It states that Ranson bears that responsibility.

Now to the text of the letter I wrote yesterday:

It's not that I am not concerned about how various industries could impact our very different water situation in this area. With seventy percent of the county on private or public wells fed by our very special Karst aquifer, I am very concerned. All should be, to include all those drawing drinking water from the Potomac River. Why else would there be the special signs beside the road as one enters the area? A truck wreck could be disastrous, not to mention spills of any of the many hazardous substances by an industry using such.

Furthermore, it is not that I'm not concerned with the economic impact on our trio of intertwined main industries providing money not only to the county, but also to the state, our agriculture, equine, and tourist industries. I am greatly concerned.

I am also concerned about health impacts of various industries on certain crops, humans, and horses. What is the health of a person worth? For how many dollars? is it okay for a person to die earlier than they would have before the industry was established?

All of those are grave concerns. However, as a former teacher of those with learning and emotional disabilities, I am going to focus on children. I have a particular heart for children, especially for the "underdog," those who will be struggling to gain an education that will enable them to be earn enough to have a successful life and to give back to the community, state and federal government. I've found in the past too few fully grasp why one would spend more money to provide special education. Everyone is impacted when there are members of society that end up needing help in their adult lives, rather than become contributing members of society. The cost of those who are in poverty and end up on drugs, commit crimes, need specialized care is paid by all, not to mention the individual him or herself and their family.

So much is involved in the success of a fragile embryo developing into a healthy baby. Many of these things are under the control of the mother following medical advice. However, there are things beyond her control to include what is in her water system and what is in the air. My first teaching experience, just prior to the 1975 Education of Handicapped Children Act, later changed to the Individuals with Disabilities Education Act (IDEA), was in a coal mining town not far from Morgantown, WV. At that point, I did not have a special education degree, yet I had many in the class who would have qualified for special education if there were such. I know now that the water and the air in a time of coal burning furnaces and dads with coal dusty clothes likely had an impact. Furthermore, as I have learned more about the fine particles from many industries and certainly from the burning of coal, pass the placenta and impact that child before he or she is even born. If it is a girl that impact can impact her in ways that continue into adulthood and impact the child she

may have. The students in my class were no doubt products of generations of coal miners, living close to the coal mining, burning coal, with coal dust not only on Dad's clothes, but the porch, the sidewalks, etc. I know that in Morgantown at that time, many in town still burned coal. I remember sweeping the dust off the porch and the snow quickly turning gray.

My letter continues after these two references so please continue until the end.

REFERENCE 1 This commentary summarizes the robust scientific evidence regarding the multiple current and projected health impacts of fossil fuel combustion on the young to make the case for a holistic, child-centered energy and climate policy that addresses the full array of physical and psychosocial stressors resulting from fossil fuel pollution.

Discussion:

The data summarized here show that by sharply reducing our dependence on fossil fuels we would achieve highly significant health and economic benefits for our children and their future. These benefits would occur immediately and also play out over the life course and potentially across generations.

Conclusion:

Going beyond the powerful scientific and economic arguments for urgent action to reduce the burning of fossil fuels is the strong moral imperative to protect our most vulnerable populations.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289912/>

REFERENCE 2 Although air pollution isn't healthy for any living creature, it has the most severe impact on pregnant women, children, babies, those with respiratory problems, and the elderly

Potential Dangers of Being Exposed to Air Pollution During Pregnancy Research is always uncovering more serious data about what polluted air can do to pregnant women and their babies.

Here are some of the sobering consequences you may need to watch out for.

Low Birth Weight – *The ideal pregnancy delivers six to nine-pound [babies at 38–40 weeks](#). Babies under five pounds eight ounces are considered “low birth weight.” On average, one in every 12 babies in America is born underweight—for a variety of reasons—but exposure to air pollution while pregnant is speculated to cause this complication.*

An interesting study in Beijing—one of the world's worst cities for air pollution—made strides in connecting air pollution to low birth weight. Researchers studied women who were pregnant during the 2008 Olympics in Beijing, a two-month span when the city was mandated to lower emissions and improve air quality. The study found that women who were in their eighth month of pregnancy during the Olympics (compared to women who delivered during the same calendar months years prior) delivered babies who were 0.8 ounces heavier. It's still unknown which trimester, month, or week is most vulnerable to the effects of air pollution, but the study is nevertheless compelling.

Preterm Birth – *According to a study by The Stockholm Environment Institute (SEI) at the University of York, nearly three million babies are born prematurely each year because of air pollution. That means 18 percent of all annual [preterm births](#) have been linked to exposure to particulate matter pollution. Children born before term have a significant risk of neurological disorders and permanent physical disabilities. While premature birth can happen to anyone for many reasons, air pollution is one you should try to avoid.*

Autism – An alarming Harvard study revealed that women exposed to high particulate matter pollution during their third trimesters were twice as likely to deliver a child with autism—especially if they lived near a highway where particulate matter is highest. It's important to note that this study found that women exposed to the same dangerous levels of the particulate matter earlier in pregnancy didn't experience an elevated risk of having a child with autism.

Asthma – Air pollution exacerbates asthma. In pregnant women, this can be dangerous because asthma can cause preeclampsia, a condition that causes elevated blood pressure and decreased function of the liver and kidneys. When asthma is well-managed, you and your baby should be fine. However, untreated asthma can cause your baby to suffer from lack of oxygen, leading to poor growth, premature birth, and low birth weight. Research has also found that exposure to air pollution can increase your baby's chances of developing asthma later in life because particulate matter pollution breaches the placenta.

Fertility Problems – If you plan on starting or expanding a family, you may need to be careful with the air you breathe. Multiple studies have determined air pollution contributes to lower fertility rates in men and women. Some research also links air pollution to miscarriages. <https://americanpregnancy.org/pregnancy-health/how-air-pollution-impacts-pregnancy/>

At age fifty I finished a degree in special education while working as an instruction assistant with students with disabilities and returned to the classroom as a special education teacher in Northern Virginia where I worked with students with special needs in grades two through six. It was challenging work. Sometimes students had breakthroughs and the future looked bright, other times not so much. Many times these were students from families with less money. Where do families with less money usually live? Where no one else wants to live and often this includes near industries.

Many would choose not to live near industries for many reasons (noise, traffic, possibly pollution from smoke stacks, lights). However, what if the community were already established nowhere near industry but just in an area not as attractive with less expensive homes. Those with lower incomes do not have a lot of choices when looking for a place to live, or perhaps they are families who have a family home that they inherited and perhaps were not forced into the area by lower income, but by love of their homeplace.

Now look at it from the other side, a company looking for a place to place a factory. Where would someone build an industry? Where would one place it? Would one choose a location near an expensive housing development? No. Why not? Because it is common knowledge that those with money and a nice home are not going to want a factory near them and have the resources to put up a big fight. Are the lives of those with less money worth less? Are their children expendable? What if everyone realized they, too, would be impacted through extra taxes, crime, etc., children's development is impacted by pollution?

Both my husband and I are native West Virginians, born, raised, and educated through college degrees in this state, although not this part of the state. We returned to West Virginia following military and other careers and one of our big concerns and serious discussions before choosing to return was state politics. West Virginia has forever been in the hands of the extraction industries:

lumber, coal, oil and now gas. We are our own worse enemy. Dirt poor as states go as the extraction industries are all too often taking our resources without paying adequately for them.

For too many West Virginians that means a life of poverty and finding a home where ever one can, even if it is a dangerous place. On the other hand, Jefferson County has been an exception, rich with its equine, agriculture and tourism industries. It's terrain beautiful and relaxing, yet not as ridiculously expensive as other nearby areas. Thus, we've drawn two other groups who have added to the richness both to the county and the state—those looking for a less expensive places to live or better places to raise their children while working to the east of us and those of us who have chosen this as a wonderful place to retire. We chose this, barely back into our home state, as a wonderful place to retire. We have been providing the county with property tax dollars and the state with income tax dollars. Various businesses and restaurants have benefited from our moving here. Similarly while not in the list of equine, agriculture and tourists industries, those who have moved here are providing much to local and state economies. Already some have moved away and others are prepared to move if polluting industries are built. We all have to consider our health. Those with resources to do so may be moving out if they haven't already done so, whether they are concerned for their children, their baby on the way, or their life in older years.

Introduction of polluting industry impacts everything in a county. The danger of certain industries to the health of those who are born and those on the way is too great.

The Ranson Comprehension Plan commands: Encourage manufacturing and assembly line facilities to locate in Ranson. The city will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect health, safety, or welfare of the community. (My underlining)

You must vote no on ordinance #2017-302. The existence of this county and its richness depend on it, and there is a strong moral imperative to say, "No," that rests in your hands.

Sincerely,

Cheryl Pullen
P O Box 1608
Shepherdstown, WV 25443

RE: Ordinance #2017-302.

It's imperative that you vote no on Ordinance #2017-302.

It's not that I am not concerned about how various industries could impact our very different water situation in this area. With seventy percent of the county on private or public wells fed by our very special Karst aquifer, I am very concerned. All should be, to include all those drawing drinking water from the Potomac River. Why else would there be the special signs beside the road as one enters the area? A truck wreck could be disastrous, not to mention spills of any of the many hazardous substances by an industry using such.

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I am also concerned about health impacts of various industries on certain crops, humans, and horses. What is the health of a person worth? For how many dollars, is it okay for a person to die earlier than they would have before the industry was established?

All of those are grave concerns. However, as a former teacher of those with learning and emotional disabilities, I am going to focus on children. I have a particular heart for children, especially for the "underdog," those who will be struggling to gain an education that will enable them to be earn enough to have a successful life and to give back to the community, state and federal government. I've found in the past too few fully grasp why one would spend more money to provide special education. Everyone is impacted when there are members of society that end up needing help in their adult lives, rather than become contributing members of society. The cost of those who are in poverty and end up on drugs, commit crimes, need specialized care is paid by all, not to mention the individual him or herself and their family.

So much is involved in the success of a fragile embryo developing into a healthy baby. Many of those things are under the control of the mother following medical advice. However, there are things beyond her control to include what is in her water system and what is in the air. My first teaching experience, just prior to the 1975 Education of Handicapped Children Act, later changed to the Individuals with Disabilities Education Act (IDEA), was in a coal mining town not far from Morgantown, WV. At that point, I did not have a special education degree, yet I had many in the class who would have qualified for special education if there were such. I know now that the water and the air in a time of coal burning furnaces and dads with coal dusty clothes likely had an impact. Furthermore, as I have learned more about the fine particle from many industries and certainly from the burning of coal, pass the placenta and impact that child before he or she is even born. If it is a girl that impact can impact her in ways that continue into adulthood and impact the child she may have. The students in my class were no doubt products of generations of coal miners, living close to the coal mining, burning coal, with coal dust not only on Dad's clothes, but the porch, the sidewalks, etc. I know that in Morgantown at that time, many in town still burned coal. I remember sweeping the dust off the porch and the snow quickly turning gray.

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At age fifty I finished a degree in special education while working as an instruction aid with students with disabilities and returned to the classroom as a special education teacher. This time in Northern Virginia where I worked with students with special needs in grades two through six. It was challenging work. Sometimes students had breakthroughs and the future looked bright, other times not so much. As an aside, all these students should have been receiving special help from a very early age. Often these were students from families with less money. Where do families with less money usually live? Where no one else wants to live and often this includes near industry.

Many would choose not to live near industries for many reasons (noise, traffic, possibly pollution from smoke stacks, lights). However, what if the community were already established now near industry but just in an area not as attractive with less expensive homes. Those with lower incomes do not have a lot of choices when looking for a place to live, or perhaps they had a family home that they inherited and perhaps were not forced into the area by lower income, but by love of their homeplace.

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Potential Dangers of Being Exposed to Air Pollution During Pregnancy Research is always uncovering more serious data about what polluted air can do to pregnant women and their babies.
Here are some of the sobering consequences you may need to watch out for.

- **Low Birth Weight** – The ideal pregnancy delivers six to nine-pound [babies at 38–40 weeks](#). Babies under five pounds eight ounces are considered “low birth weight.” On average, **one in every 12 babies in America is born underweight**—for a variety of reasons—but exposure to air pollution while pregnant is speculated to cause this complication.

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the Olympics (compared to women who delivered during the same calendar months years prior) delivered babies who were 0.8 ounces heavier. It's still unknown which trimester, month, or week is most vulnerable to the effects of air pollution, but the study is nevertheless compelling.

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- **Fertility Problems** – If you plan on starting or expanding a family, you may need to be careful with the air you breathe. Multiple studies have determined **air pollution contributes to lower [fertility](#) rates in men and women.** Some research also links air pollution to [miscarriages](#).

<https://americanpregnancy.org/pregnancy-health/how-air-pollution-impacts-pregnancy/>

Now look at it from the other side, a company looking for a place to place a factory. Where would someone build an industry, where would one place it? Would one choose a location near an expensive housing development? No. Why not? Because it is common knowledge that those with money and a nice home are not going to want a factory near them and have the resources to put up a big fight.

Children living near existing industries that are emitting certain fine particles are at risk. Children being carried in their mother's womb are at risk and quite possibly, the girls later become moms carrying the risk to yet another generation. It does not matter whether they chose to live near the industry because it was all they could afford or because a polluting type of industry moved next to a treasured old home, the children, and the adults, are at risk.

Both my husband and I are native West Virginians, born, raised, educated through college degrees in this state, although not this part of the state. We returned to West Virginia following military and other careers and one of our big concerns was state politics. West Virginia has forever been in the hands of the

extraction industries: lumber, coal, oil and now gas. We are our own worse enemy. Dirt poor as states go as the extraction industries are all too often taking our resources without paying adequately for them.

For too many West Virginians that means a life of poverty and finding a home wherever one can, even if it is a dangerous place. On the other hand, Jefferson County was been an excewption, rich with its equine, agriculture and tourism industries. It's terrain beautiful and relaxing, yet not as ridiculously expensive as other nearby areas. Thus, we've drawn two other groups who have added to the richness of the county for both the county and the state—those looking for a less expensivew place to live or a better place to raise their children while working to the east of us in those rich areas and those of us who have chosen this as a wonderful place to retire. We chose this, barely back into our home state, as a wonderful place to retire. My husband just retired. We have been providing the county with dollars of property tax and the state with income tax. Various businesses and restaurants have benefiuted from our moving here. Similarly while not in the list of equine, agriculture and tourists industries, those who have moved here are providing much to local and state economies. Already some have moved away and others are prepared to move if polluting industries are built. We all have to consider our health. Those with resources to do so may be moving out if they haven't already done so, whether they are concerned for their children, their baby on the way, or their life in older years.

Introduction of pollutiung industry impacts everythiung in a county where a drive past farms and homes was once relaxing. The danger of certain industries to the health of those who are born and those on the way is too great.

You must vote no on ordinance #2017-302. The existence of this county and its richness depend on it.

Stacey Pfaltzgraff

From: Rich <richp9000@yahoo.com>
Sent: Sunday, June 14, 2020 10:48 PM
To: Stacey Pfaltzgraff
Subject: Rezoning for Heavy Industry

CAUTION: External Email

Ranson does not need 150 low paying jobs from heavy industry. This area is filled with residents making far greater money than what those 150 jobs will pay. This industry will drive everyone with that money out because they can afford to leave, and they'll take the property, income, sales taxes and spending power with them to northern Va and Maryland. They came here with their money because it's cheap compared to MD and VA, however, they will not stay here if it means living near heavy industry. I know because I'm one of them. I can afford to live anywhere. I choose to live near Ranson because it's beautiful, scenic, my money goes a lot further here and because theres no heavy industry. Think about how many of me reside in this area and will be taking our tax dollars and spending power back to the tri state area. I'm thinking it's more money than this industry and those 150 jobs will bring in.

Sent from my iPhone

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Oscar Rodriguez <orodriguez188@yahoo.com>
Sent: Saturday, June 13, 2020 3:06 PM
To: Stacey Pfaltzgraff
Subject: Toxic Rockwool

CAUTION: External Email

The proposed Ordinance #2017-302 that protects Rockwool rather than the general welfare of the community is an indication of how some politicians are neglecting the duties for which they were elected uphold. It is time for a change and Rockwool construction must be stopped.

Oscar Rodriguez

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Scott Rogers <scottrogers614@gmail.com>
Sent: Thursday, June 18, 2020 10:10 AM
To: Stacey Pfaltzgraff
Subject: Fwd: Letter Calling for the Resignation of Mayor Duke Pierson, City of Ranson, WV

CAUTION: External Email

Please add to the record regarding the Ranson rezoning hearings.

May 7, 2020

Dear Mayor Pierson,

This letter is calling for your immediate resignation as Mayor of the City of Ranson and for you to make a formal apology to the people of Jefferson County for attempting to destroy their environment, and most importantly, the health of their children.

The City of Ranson's misdeeds in respect to Rockwool and "Project Shuttle" are many, and I don't have the time or the patience to reiterate them all in this letter. This letter will highlight some of the most glaring reasons for you to resign.

1. It is clear from yesterday's court ruling that the City of Ranson misused "sustainable community" smart zoning to allow heavy industry when they rezoned for Rockwool, and they did it without proper public notice. Like much of "Project Shuttle", the City of Ranson sought to deceive the public and its neighboring cities.
2. As Mayor of Charles Town, I sought to be a good partner and friend of Ranson. Our comprehensive plan, which our citizens worked on for over a year, sought to align many of our goals with that of Ranson's and its comprehensive plan. However, by the entity of Ranson's deceitful tactics, you destroyed that trust, and the trust of the people. You negated years of hard work by citizens of Charles Town.
3. I was personally lied to regarding "Project Shuttle" and the framework for Rockwool's operations. As a former Climate Mayor, a Mayor for Solar, and a supporter of the Beyond Coal movement, I never would have publicly supported Rockwool if I had known they would be burning 93 tons of coal per day across the street from an elementary school. To make this clear for you, I was told Rockwool would not be burning coal. In fact, I was told that another process, a more environmentally

sustainable process would be used. This of course was a lie. Was it the same thing they told Commissioner Osnoko when he publicly stated that the air coming out of Rockwool's stacks would be cleaner than the ambient air? Was this the process they explained to the Jefferson County School Board? Was this the process they explained to the Jefferson County Commission.

4. Further, the City of Ranson sought to intimidate me directly or through intermediaries on more than one occasion. For example, your city attorney said you would have me removed from office for criticizing you and your former City Manager, Andy Blake's leadership. Admittedly, I laughed at this, and to be quite frank with you, I told our city lawyer to tell you and your lawyer something I won't repeat. However, I was contacted by a Charles Town City Council member who was concerned that you would pull out of police and other cooperative programs with Charles Town, so I backed off. I regret backing off, I should have continued to press for your removal and for full investigation into the City of Ranson, Rockwool and other entities.

5. I received a phone call from a consultant of the City of Ranson noting that if I did not stop criticizing the City of Ranson, Project Shuttle, and Rockwool, that Ranson would cancel the Christmas Parade, and pull out of police and other cooperation with the City of Charles Town. We know how you played this out in the press. Further, I was told that I had made powerful enemies within the State of West Virginia and I should keep my mouth quiet on this topic for my own good.

6. Following the secret meeting at the Bavarian Inn, which included West Virginia state officials, Ranson officials, Rockwool, and other pro-Rockwool stakeholders my life would forever change. Following that meeting there was a concerted effort by pro-Rockwool supporters, which I believe in some cases rose to the level of a criminal conspiracy to drive me from office and my family from West Virginia.

7. Additionally, because of my opposition to Rockwool, I was threatened with more lawsuits than I can remember. I was threatened with being doxed, and in fact, I was doxed, with the release of my personal home number, people threatened to come to my home, and my computer was broken into. This has been reported.

8. More recently, a pro-Rockwool group, that has received the praise of Bjørn Rici Andersen, Senior Vice President, Group Operations & Technology for Rockwool, contacted my place of employment, libeled me, threatened to sue me, all because I spoke out against their supported pro-Rockwool candidates. You may know these folks, Duke.

So, Duke, this is just a snapshot of how my life has gone since Rockwool, and the reality is, I am tired of being threatened.

If you have any shred of honor or human decency left, you will resign and apologize to the people of Jefferson County for the evil you have unleashed. Please apologize to the crying mothers who asked me to stop Rockwool from building their coal-fired, heavy industrial factory that will poison their children's air.

Duke, do the right thing, apologise and resign.

Sincerely,
Scott Rogers
Former Mayor, City of Charles Town, WV

City of Ranson Hearing for Proposed Ordinance June 16, 2020

Submitted by Beverly Ross

3 pages submitted (including cover page) and one attachment with 2 pages

Submitted via email to: spfaltzgraff@ransonwv.us

On June 12, 2020

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Ranson Hearing

Tuesday, June 16, 2020

Statement submitted by Beverly Ross

When **rezoning** is implemented, three principal reasons must govern a change in order for it to be legal: (1) the rezoning may be the result of any change of conditions on the land; (2) may be called for by the character of the district and the particular characteristics of the area being rezoned; and (3) may be called for by the classification and use of nearby land.

Illegal zoning can be in the form of “**contract zoning**.” Any rezoning accomplished through a bargain between the applicant and a board rather than the proper and valid exercise of a County’s legislative process, the rezoning would be void and constituted as illegal “contract zoning.”

When analyzing the history of the Comprehensive plan and this current application to rezone the land, the following facts conclude that the original Comprehensive plan must be upheld and the illegal practice of “contract zoning” must be rejected.

1. The Ranson Comprehensive Plan included a federal grant of \$100,000 on a feasibility study for the North Port Station. It took over a year and completely laid out the entire project. Including engineering and design. It was presented in June 2015 to members of the City of Ranson, City of Charles Town, the County, the State, AND the owners of Jefferson Orchards. It was then made "official" by a formal Resolution adopted by the City of Ranson in July 2015.
2. This Comprehensive Plan was based on the SmartCode - **New Community** planning model.
3. The WV Development office advertisement flyer for Jefferson County stated : *Zoning - Industrial 95 acres, Mixed Use 293 acres (will rezone for larger users) County - Jefferson*
4. In 2017, after Rockwool was in negotiations, the City of Ranson passed an ordinance rezoning the land previously known as Jefferson Orchards from Smart Code – **New Community**, to Smart Code – **Special District Industrial**. One month before this, Ranson amended the ordinance regulating the designation Special District Industrial so it could accommodate large heavy industrial installations such as Rockwool.
5. Jefferson Orchards entered into a lease agreement with Roxul, aka Rockwool *prior* to their zoning ordinance application change dated 6/19/17. Therefore the usage of the land and the true requestor of the zone change needed to be identified as part of the application. Jefferson Orchards can not represent itself as the owner / user of the land. We now know that RW was promised the zoning change as a condition of the forthcoming PILOT agreement dated 10/03/2017.

6. In Rockwool's response to the zoning lawsuit against the City of Ranson, Rockwool states..."We began investing millions of dollars in anticipation of the amended zoning codes."
7. The application states that the rezoning is consistent with the 2012 Ranson Comprehensive Plan. If the rezoning is consistent with the plan, then a zoning change request is nonsensical. This is false to conclude that the heavy industrial classification is consistent with the original SmartCode-New community.
8. The city council has not addressed the significant impacts to our county or the Hagerstown, Eastern Panhandle Metropolitan Planning Organization. Charles Town's Transportation Plan (prepared by HEPMPO in 2014) was based on the adopted 2012 Ranson Comprehensive Plan - which stated that Jefferson Orchards was to be developed as a Transit Oriented Mixed Used Development built around a MARC Station with connections to EPTA

I urge the courts to reject the zoning application as fraudulent and illegally submitted. I urge the City of Ranson to uphold the Comprehensive Plan.

Attachment: JCDA Advertisement for Jefferson Orchards 2016



WEST VIRGINIA DEVELOPMENT OFFICE
1900 Kanawha Boulevard East
Charleston, WV 25305-0311
Toll free: (800) 982-3386
Office: (304) 558-2234 • WVDO.org

AVAILABLE PROPERTY JEFFERSON ORCHARDS SITE



RAMSON, WEST VIRGINIA

LOCATION

City Limits - Ranson
Zoning - Industrial 95 acres, Mixed Use 293 acres (will rezone for larger users)
County - Jefferson
Flood Hazard Zone - Location is NOT WITHIN any identified flood hazard area

SIZE

Total Acreage - 388 acres
Will Owner Subdivide the Property - Yes
Acreage Range That Owner Will Subdivide - 10 acre or greater parcels

TRANSPORTATION

Interstate/4 Lane Highway - 1.0 miles to Route 9, 9 miles to I-81
Interchange Exit 12
Commercial Airport - 48 miles to Washington Dulles International Airport
Railroad - CSX
Railroad Siding - To be located per user specifications
Navigable River - None
On-Site Barge Facility - None

UTILITIES

Electricity - Potomac Edison
Proximity to Power Line - Located on the property
Voltage - 480
Phase - 3

Gas - Planned 2017
Proximity to Gas Main -
Size of Gas Main - Gas
Pressure -

Water - Jefferson County PSD
Proximity to Water Main - +/- 1 mile from site, to be extended to accommodate

future industrial development
Size of Water Main - 8" and 10"
Water Pressure (Static) -
Water Pressure (Residual) -
Excess Capacity of Treatment Plant - 500,000+ gpd

Sewer - Jefferson County PSD
Proximity to Sewer Main - +/- 1 mile from site, to be extended to accommodate future industrial development
Size of Sewer Main - 8"
Excess Capacity of Treatment Plant - 200,000 gpd

Telephone - Frontier
Switching - Digital
Broadband Service - DSL service available

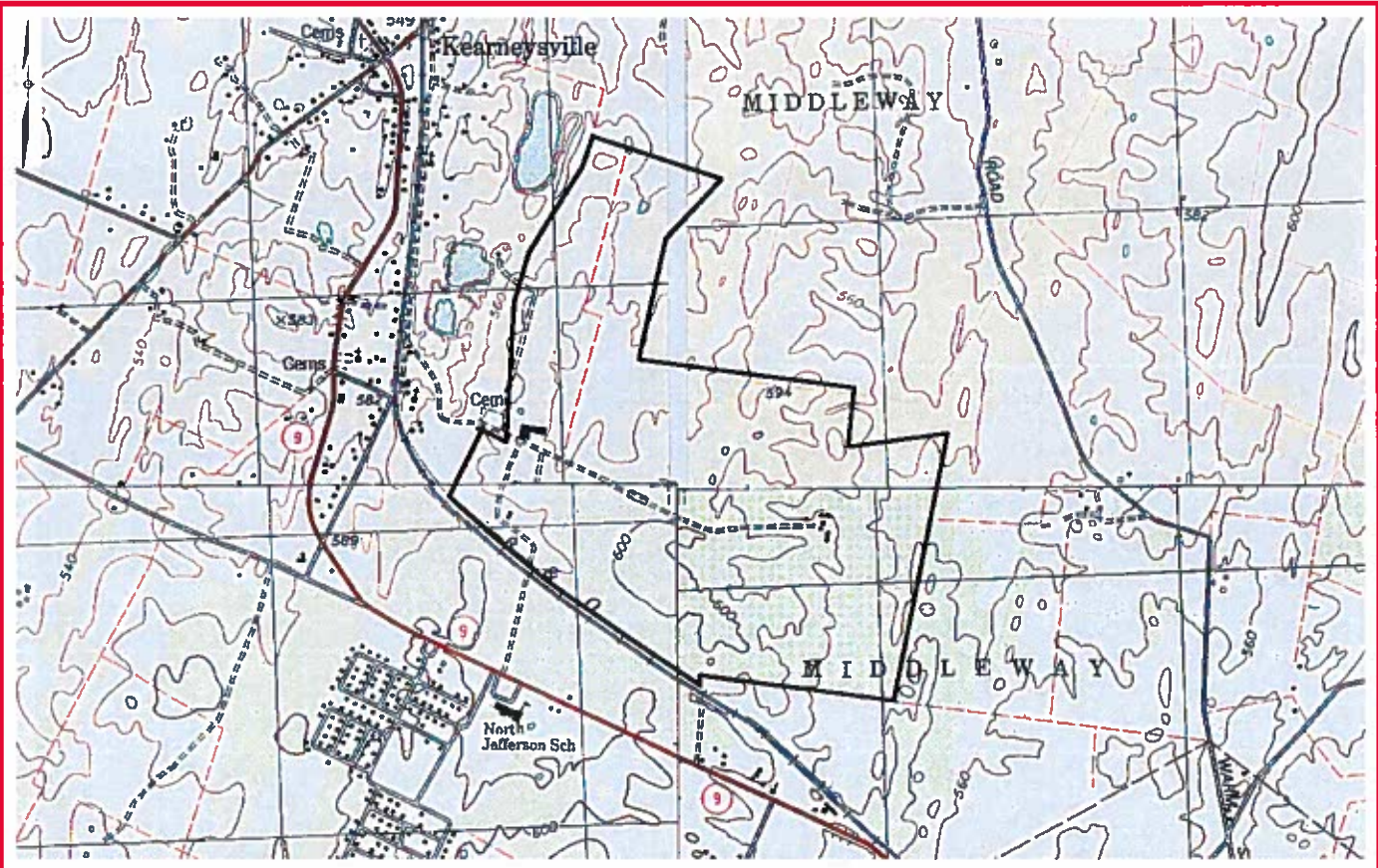
SALE/LEASE

Sale Price - \$75,000 to \$80,000 per acre
Available Purchase or Lease Date - Immediately

FOR FURTHER INFORMATION CONTACT

John Reisenweber, Executive Director
Jefferson County Development Authority
PO Box 237
Charles Town, WV 25414
Phone: (304) 728-3255
Fax: (304) 725-3133
Email: John@jcda.net
Website: www.jcda.net

Disclaimer: The information contained herein is from multiple sources and is provided as a convenient guide. It is deemed reliable, but is not guaranteed, and is subject to change without notice. It is your responsibility to independently confirm its accuracy and completeness.



SCALE: 1" = 2000'



RANSON, WEST VIRGINIA

Attachment: 20200623 - Written Comments - Packet #7 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Edward Erfurt
Sent: Thursday, June 18, 2020 10:44 AM
To: Stacey Pfaltzgraff
Cc: Tony Grant
Subject: FW: Online Form Submittal: Contact Ranson (Dropdown)

Stacey

Please see the Public Comment for resolution #2017-302

Edward W. Erfurt IV
Assistant City Manager
Community Development

City of Ranson
[312 South Mildred Street](#)
[Ranson, WV 25438](#)
(o) 304-724-3861
(c) 304-283-2260
eerfurt@ransonwv.us

From: noreply@civicplus.com <noreply@civicplus.com>
Sent: Wednesday, June 17, 2020 4:24 PM
To: Permits <Permits@ransonwv.us>; Kim Hawkins <khawkins@ransonwv.us>
Subject: Online Form Submittal: Contact Ranson (Dropdown)

CAUTION: External Email

Contact Ranson (Dropdown)

First Name	Loretta
Last Name	Schoettler
Address1	1308 Engle Molers Road
Address2	<i>Field not completed.</i>
City	Harpers Ferry
State	West Virginia
Zip	25425-5435
Phone Number	3045821568

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Email Address	loretta@mypetchicken.com
Whom would you like to contact?	Building Inspection
Question / Comment	<p>Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"</p> <p>Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that will significantly harm the municipalities within Jefferson County and beyond affecting the health, welfare, and safety of our community. Harpers Ferry is a national treasure with the natural and historic resources tours flock to see each year and one of the communities that will be negatively impacted by this zoning change.</p> <p>I moved to Jefferson County in 2009 because I thought it was the best place to work from home in an environment dedicated to recreational tourism. By moving the county's economic base toward heavy industry you undermine all the great work by small businesses that invite tourists from all over the world to enjoy Harpers Ferry and the surrounding communities of Jefferson County.</p> <p>According to a 2019 study by the West Virginia Tourism Office, Jefferson County generated an average of \$178 million per year in tourism-derived revenue for state and local governments over the last 10 years, more than any other county in West Virginia by at least double. Tourism benefits the businesses and economy of Ranson and Jefferson County producing \$213.7 million in individual earning, 7040 jobs, and \$842.6 million in direct spending here in 2018. We would need 40 Project Shuttles to replace the individual earnings and 59 Rockwools to replace the jobs provided by the tourism industry in Jefferson County. It is important to note that most of the money generated by tourism in Jefferson County comes from neighboring states. In this way, it is like an export: not simply recycling money, but bringing money into the state increasing its wealth. Much of the economy in Harpers Ferry is based on this tourism industry. A threat to this industry poses a threat to the economy and welfare of our community.</p> <p>One of the important drivers for tourism in Harpers Ferry is the Appalachian Trail. According to the Appalachian Trail Conservancy (ATC), Harpers Ferry is the psychologic midpoint</p>

of the Trail, and hikers often plan extended stays in Jefferson County with an obvious positive impact. The ATC reports that the smokestacks and associated lights will be visible in the viewshed of 15 vistas on the Appalachian Trail (AT). Studies have shown that quality of vistas and human impact on the environment are not only noticed by visitors, but effect their experience. Another study published in the *Journal of Applied Recreation Research*, found that points of interests and views drew visitors' attention and had a significant impact on their perception of the trail. It was also found that particularly beautiful vistas helped visitors overlook elements that usually have a negative effect on trail experience like increased trail traffic. A 2009 study in *Leisure Sciences* revealed that scenic value was a perceptual theme of Appalachian Trail visitors, and that things as simple as dead trees visible in a vista can have a negative impact on visitors' overall perception. Imagine the effect the smokestacks will have from the 15 vistas from which they will be visible. The introduction of industrial activity made possible by the proposed rezoning in Ranson would have a negative effect on the scenic views of beautiful landscapes from the Appalachian Trail in Jefferson County.

The smokestacks are not all visitors will be able to see — the air pollution will create haze.

The effect of regional haze on tourists was explored in a review article published in the *Atmospheric Environment* titled "Impaired visibility: the air pollution people see." A key takeaway on the negative affect of haze on vacationing tourists was summarized as follows:

"Vacations offer an escape from the routine and stress of our daily lives. Vacation destinations are often chosen based on their scenery; vacations are spent gazing at monuments, mountains, clouds, and oceans. Good visibility allows clear observation of distant features and appreciation of the inherent beauty of these scenes...Air pollution, which is often present in both our cities and parks, interferes with these attributes and can ruin the views vacationers travel to enjoy."

People seek bucolic, unspoiled areas to escape the stresses of urban areas. A 2004 study in *Environment and Behavior* found perceived pollution causes stress while viewing natural scenes has both psychological and physiological benefits, and a 2007 study confirmed these benefits. Two other studies found that people are emotionally affected by poor visibility, and tourists are disappointed when views are obscured by haze.

The combination of smokestacks and haze will mar the

viewshed and will not only reduce the positive effects of a scenic landscape but also leave tourists disappointed and dissatisfied with their choice of destination. With these effects the welfare of the Harpers Ferry community would undoubtedly be endangered by the industry that this zoning change will provide for.

Multiple studies by doctors Kozar, Doctor, and Doctor have demonstrated that the land at this site to be rezoned is Karst with the highest likelihood of sinkhole development in the county, and that the groundwater aquifer there is incredibly sensitive to contamination from surface water. Further, this site is on an upland plain with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. In this area contamination in surface water communicates easily to the water in the epikarst via diffuse and point infiltration, and the springs at the margins of the upland area are directly affected by the water quality throughout the aquifer. According to Jefferson Orchards Voluntary Remediation Plan with the WVDEP, the groundwater at the site is approximately 60 feet below the ground, and die tests performed by the USGS have shown that groundwater from just adjacent to this site emerged in the headwaters of both the Elk's Run and Rattlesnake Run. This is critically important for Harpers Ferry because the Elk's Run headwaters is a spring about three miles southeast of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River. The headwaters of Rattlesnake Run is a spring about 3.5 miles from the site and is also a tributary of the Potomac River. The Potomac River is the back up water source for Harpers Ferry. This means that the activity at the site will have a critical influence on the drinking water of Harpers Ferry. In this was the industry permitted by this change in zoning would undoubtedly endanger the health and safety of the community in Harpers Ferry.

The untoward health effects and individual economic consequences from the pollution emissions of the industry this rezoning will allow that will be born out over the length of people's lives and that of their decedents for at least three generations is an egregious example of environmental injustice that should not be tolerated. This zoning change may be in one of the poorest sections of the county, but the effects will be felt in every part of Ranson and the county.

The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the

health, safety, or welfare of the community.” The industry that this rezoning will allow will jeopardize the health, safety and welfare of Ranson, Harpers Ferry and the whole county. Please vote no on the ordinance #2017-302.

Sincerely,
Loretta Schoettler

Email not displaying correctly? [View it in your browser.](#)



STATEMENT OF THE EASTERN PANHANDLE SIERRA CLUB

Ranson City Ordinance #2017-302

I am writing on behalf of the Eastern Panhandle Sierra Club, a division of the WV Sierra Club. Our club covers Jefferson, Berkley, and Morgan Counties and we have 493 members (262 in Jefferson County alone) at last official count. We are urging you to correct your actions of 2017 (Ordinance #2017-302) and revoke Rockwool's building permit.

We are extremely concerned about the errors made by the City of Ranson in 2017 when reallocating transect districts established in 2012, thereby diminishing the civic zones and civic buildings from 21 ½ acres to 14 acres. This action showed no regard for citizen and environmental needs in the City of Ranson and neighboring communities. The re-zoning effort left the door open for hazardous heavy industry to replace the previously approved multi-use land development of this site, which included a Marc Train station, housing and business development. The former planned development, known as The Comprehensive Plan, would have benefited the City of Ranson and Jefferson County as a whole. Allowing Rockwool to come in is disastrous.

Important and significant decisions were made by Ranson without public participation in 2017 which disregarded proper procedure and violated the law. The Eastern Panhandle Sierra Club joins many others in urging you to vote against this ordinance which puts the needs of Rockwool above those of the citizens that you represent. You have a chance to redeem your Council and we strongly encourage you to take it.

Heavy industry is not wanted in Ranson or anywhere else in Jefferson County because it will adversely affect local businesses such as agriculture, equine and tourism. It will be harmful to the lives of those attending nearby schools and deteriorate air, land and water quality. It does not align itself with the Comprehensive Plan and it is an example of environmental discrimination. The plan was produced with the help of a federal grant and it was basically a promise to Jefferson County citizens. Citizens were counting on this desirable development only to have this plan ditched without any real input.

To provide the full picture of our involvement in the Rockwool controversy, I am enclosing some additional information.

Background Information:

During July 2018 local citizens learned that a Danish corporation had been issued an air permit for a large manufacturing facility near Kearneysville, WV, and that this project had been promoted to our local authorities under the name "Project Shuttle." The air permit application had been noticed only one time in the local Spirit on the day before Thanksgiving 2017; therefore, there was no chance for citizens to have any input on this massive project which was proposed and promoted in secrecy.

Upon learning of the application, Sierra Club had the air permit evaluated by our Consultant, Dr. Armendariz. Based on the problems he found, we sent the following July 2, 2018, letter to the Director of Air Quality at WVDEP. (Attachment 1.)

The July 20, 2018, response we got from Director Durham was very disturbing in that our challenges to inaccurate data and faulty assumptions were dismissed, almost "we used it because the law allows...." (See Attachment 2.)

On August 11, 2018, local citizens issued the attached Rockwool Ranson, WV Information Sheet. Since that time Jefferson County citizens have sought the opportunity to have input on a project that was brought to our area in secret, that gives away our scarce local property tax receipts, that negatively impacts our booming local economy and, most importantly, will harm the health of our local citizenry with an outsized effect on our vulnerable school children. (Attachment 3)

Our members plan to attend the first reading on June 16 and speak at the Zoning Meeting on June 23rd. We look forward to participating with the citizens of Ranson in re-shaping the future of our community for the benefit of all. Please contact me if you need additional information from the Sierra Club.

Sincerely yours,

Gail L. Kohlhorst
Chair, Eastern Panhandle Sierra Club
3153 Engle Molders Rd., Harpers Ferry, WV 25425
Kohlhorst@comcast.net

Attachments:

1. Sierra Club letter to WVDEP Director Division of Air Quality
2. Response of Director Durham
3. Citizen Analysis of Rockwool's Project Impact

ATTACHMENT 1



July 2, 2018

Director Fred Durham
Division of Air Quality
West Virginia Dept. of Environmental Protection
601 57th Street SE
Charleston, WV 25304

Dear Director Durham:

On behalf the membership of Sierra Club Eastern Panhandle, thank you for the opportunity to provide feedback on Permit Number: R14-0037 for Roxul/Rockwool Group's planned mineral wool site in Ranson, WV.

Our technical staff have reviewed Rockwool Group's underlying permit application, and I'd like to relay a number of their significant concerns. We are grateful for your consideration of these issues as we work together towards the mutual goal of protecting public health.

The permit application uses 1992 demographic data, which is extremely outdated for Jefferson County, WV. Since 1992, the Jefferson County population has grown more than 50%, and much of that growth is in new residential neighborhoods near the plant site. Rockwool Group's classification of land use in the area around the site as "less than 1% urban" (pages 460-461 of 608) is surely no longer accurate; in fact there are four public schools and two freestanding daycare facilities within two miles of the plant. The close proximity of these schools-- North Jefferson Elementary is just 2,300 feet away-- raises our level of concern about the potential impact of the facility and warrants the state revisiting the permit.

With that in mind, the permit application does not include the results of any air quality modeling. The permit application contains a modeling plan, but does not appear to

include the actual results of that proposed air quality modeling. Obviously it is difficult for the public to understand or provide comments on the environmental impact of the facility without the modeling result.

Further, the air quality modeling plan does not include any potential modeling of the impacts of emissions of hazardous air pollutants such as formaldehyde, methanol, HF, HCl, and phenol. While modeling for criteria pollutant emissions is important and is planned, equally if not more important is an evaluation of the impacts of air toxic emissions on the nearby schools. The state should require that Rockwool Group evaluate the ambient air impacts and the human health risk to the children at the nearby schools from the emissions of HAPs from the facility.

The facility will further use phenol-formaldehyde resins in the manufacturing process. These resins are the matrix within which the mineral wool fibers are embedded during the process of making various products at the facility. As you know, phenol and especially formaldehyde are toxic pollutants. Formaldehyde in particular has been linked to numerous health impacts from cancer to neurological damage. It is critical for the facility model to include the impact of HAP emissions on nearby schools.

Just as important, Rockwool Group's permit application explicitly declines to evaluate a major potential pollution vector: transient operations, maintenance, startup, shutdown, and upsets. From page 439 of 608: "*Transient operations, such as startup and shutdown, related to scheduled maintenance occur once a week. Furthermore, when transient operations do occur, the emission profile of pollutants is only significantly impacted for a short period of time. Given that these events are infrequent in nature, Roxul is not proposing to separately model transient operations.*"

We strongly disagree with that position. Given the proximity of the facility to North Jefferson Elementary and three other schools, emissions from transient operations should be evaluated for their potential impact on children's health. In addition, the facility's own modeling plan (page 452 of 608) shows that the facilities emissions result in potential impacts within a fraction of one percent of the level that should result in more in-depth analysis of ambient ozone impacts (99.2% versus 100%). Spikes in emissions of ozone precursors like VOC and NOx during transient operations could elevate the steady state impacts (99.2%) to above the 100% threshold.

Likewise, the impacts of steady state emissions from the facility on visibility at nearby Class I areas (page 470 of 608) are very close to the regulatory Q/d limit (9.6 versus 10) that would require a more rigorous analysis of visibility impacts. Transient emissions could readily push the visibility impacts of the facility above the Q/d = 10 threshold.

Because of the proximity to the schools, as well as ambient ozone impacts, visibility impacts, and potentially others, Rockwool Group should be required by WVDEP to evaluate all air emissions from the facility, including both steady state and transient emissions.

Another issue is Best Available Control Technology (BACT). There are several air streams containing Volatile Organic Compounds (VOCs) and organic HAPs (like formaldehyde) that the facility is proposing to control with an afterburner (page 492 of 608, page 505 of 608). However, there is another technology, Catalytic Combustion, that might be able to achieve higher levels of pollution destruction and reduce emissions more than is possible with an afterburner. Even small increases in control efficiency, for example from 95% to 99%, can result in huge differences in emissions. Stack emissions in lbs/hr or tons/year will decrease by a factor of 5 if the control technology has a 99% control efficiency versus a 95%. Emissions of 100 tpy with a device that controls at 95% would fall to 20 tpy at a 99% control. Likewise, emissions would drop by a factor of 10 with increases in control efficiency from 99% to 99.9%.

Unfortunately, the justification for ruling out catalytic combustion in the BACT analysis is very thin: the possible presence of particulates that could foul the catalyst. While these VOC streams might contain particulates, these particulates can be removed to high efficiency by cleaning them first in devices like the wet electrostatic precipitator or fabric filters planned at the facility.

Rockwool Group should be required to submit a more rigorous BACT analysis for VOC and organic HAP control that includes the potential use of catalytic combustion and removal of particulates, especially with the consideration of the close proximity of the school. Small increases in control efficiency, through the use of catalytic systems, can result in huge drops in actual emissions. (BACT analysis and State Rule 45 CSR 06)

Another area of concern is Rockwool Group's failure to include emission estimates for metallic hazardous air pollutants. The application described how the facility will be using fuel and raw materials like coal, pet coke, anodes, eruptive stones such as basalt/diabase, amphibolite and anorthosite, slags such as blast furnace slag and converter slag, dolomite and/or limestone, mineral additives, such as olivine sand and high alumina content materials such as bauxite, kaoline clay and aludross. These fuels and raw materials are known to contain numerous hazardous air pollutants, such as mercury, arsenic, cadmium, and chromium.

During the heating, combustion, and mechanical manufacturing processes at the facility, large amounts of particulate matter are generated in the form of PM₁₀ and PM_{2.5}. While the application includes emission estimates and BACT analysis for PM₁₀ and PM_{2.5} from the various emission points, the application does not speciate the particulate matter into the numerous metallic HAPs that are constituents of those fuels and raw materials. Therefore, the community has no idea via this application what level of mercury, arsenic, cadmium, chromium, or any other metallic HAP emissions they can expect from this facility.

Likewise, since the particulate matter is not speciated and emissions of the metallic HAPs are not provided, there is no plan in the PSD application to conduct an air quality analysis of the impact of those metallic HAP emissions on the nearby schools. WVDEP should ask Rockwool Group to speciate PM emissions, provide estimates of emissions of metallic HAPs into the community, and evaluate the impact of those emissions on the ambient air and health risk at the nearby schools.

State Rule 5.2 governs odor impacts, but the PSD application fails to evaluate the impact of the facility in terms of odors. Given the emissions of phenol, formaldehyde, and other organics, an odor analysis should be provided. The application does not contain any compliance methods, monitoring methods, controls, odor threshold analyses, air quality modeling, or any other considerations for odor impacts.

We also were unable to fully analyze the Air Pollution Control Device Sheets (Attachment M forms), as they contain numerous blanks of critical information. Rockwool Group actually failed to answer key questions and provide essential information in every Attachment M. The company should be asked to complete a new set of forms with each question answered, so that the public can fully evaluate the proposed facility.

For example, the Selective Non Catalytic Reduction (SNCR) is proposed to help reduce NO_x emissions from the melt furnace. Because of all the missing information in the Attachment M forms, it is not clear if the facility is proposing to monitor the outlet concentration of ammonia from SNCR operations. This should be a requirement in the permit if SNCR is used, to help avoid excessive emissions of ammonia into the community.

Finally, as you know, there are real-time and continuous monitors available to measure concentrations of formaldehyde in exhausts, such as the Picarro G2307 Gas Concentration Analyzer. The close proximity of North Jefferson Elementary in particular makes the continuous monitoring of formaldehyde important, so that the facility,

regulators, and the public have confidence that emission rates and the performance of control equipment are meeting expectations.

Please let me know if we need to provide further information. We would request a meeting with DEP in order to discuss additional monitoring and pollution controls. Thank you for your consideration of these concerns and we look forward to your response.

Sincerely,

Regina Hendrix
Eastern Panhandle Sierra Club
65 Bradford Court
Charles Town, WV 25414

Telephone: (304) 725-0223

Email: regina.hendrix@comcast.net

ATTACHMENT 2

West Virginia Department of Environmental Protection

Division of Air Quality 601 57th Street, SE Charleston, WV 25304 Phone: (304) 926-0475

Austin Caperton, Cabinet Secretary dep.wv.gov

July 20, 2018

Ms. Regina Hendrix Eastern Panhandle Sierra Club 65 Bradford Court Charles Town, WV 25414

RE: ROXUL USA, Inc. RAN Facility Permit No. R14-0037 Plant ID No. 037-00108

Dear Ms. Hendrix:

This letter acknowledges that the WV Department of Environmental Protection, Division of Air Quality (DAQ), received from the Eastern Panhandle Sierra Club (EPSC) on July 2, 2018 a comment letter regarding the ROXUL RAN stone wool manufacturing facility. Construction and operation of this facility was authorized pursuant to Permit Number R14-0037, issued on April 30, 2018. On March 28, 2018, a Class I legal advertisement ran in the Spirit of Jefferson stating the DAQ's preliminary determination to approve R14-0037 and the start of the 30-day public comment period. At that time, the draft permit, DAQ's Modeling Report, and Preliminary Determination (Engineering Evaluation/Fact Sheet) were made publicly available, including posting on the DAQ website. Although the formal comment period ended on April 27, 2018 and the permit was issued over two months ago, the DAQ is providing the following response to your recent comments (as briefly summarized in italics).

Comment 1: 1992 Demographic Data EPSC commented that use of 1992 demographic data in the air dispersion modeling was inappropriate based on new growth around the facility since that time.

DAQ Response: Section 7.2.1.1(b)(i) of 40 CFR 51, Appendix W governs the determination of the urban or rural classification for dispersion parameterization in the AERMOD model. Appendix W states that land use of 50% or more of specific urban uses within a 3 km radius surrounding the source classifies the area within the modeling domain as "urban." Otherwise, if land use is less than 50% urban, then rural dispersion coefficients are used (i.e., there is no difference in coefficients if the land is 1% or 49% urban). Although the population of Jefferson County has increased since 1992, the current land use surrounding the plant within a 3 km radius clearly remains primarily rural in nature in accordance with metric Appendix W. A site inspection of the plant site was conducted

Promoting a healthy environment.

prior to permit issuance that visually confirmed that classifying the area as rural in the modeling was appropriate.

Comment 2: Air Dispersion Modeling Results EPSC commented that ROXUL did not include the air dispersion modeling results within the permit application.

DAQ Response: The results of the ROXUL's air dispersion modeling were submitted under separate cover on December 21, 2017 and have been available (both hard copy and an electronic copy) upon request since that time. The electronic copy of that report was also placed at that time on the DAQ website and is still available at:

<https://dep.wv.gov/daq/Documents/December%202017%20Applications/ROXUL%20Air%20Quality%20Modeling%20Report%2012-18-2017.pdf>

Comment 3: Air Dispersion Modeling of Hazardous Air Pollutants (HAPs) EPSC commented that ROXUL did not include HAPs in its air dispersion modeling.

DAQ Response: There are no state or federal requirements to conduct air dispersion modeling for HAPs and there are no state or federal air quality standards for HAPs (such as there are for criteria pollutants). Therefore, while concentrations of some HAPs may be modeled, there does not exist an objective and enforceable standard with which to compare the results. HAPs are, however, regulated through applicability under the National Emission Standards of Hazardous Air Pollutants (NESHAPs) and Maximum Achievable Control Standard (MACT) programs. This group of federal regulations - including 40 CFR 63, Subparts DDD, JJJ, ZZZZ, and DDDDD which apply to portions of the RAN Facility - are designed to identify and mitigate HAP emissions from certain source categories and contain extensive emission limits, work practice standards, monitoring, recording, and record-keeping requirements.

Comment 4: Transient Emissions EPSC commented that ROXUL did not separately evaluate or model transient emissions.

DAQ Response: The permit contains emission limits for all modeled sources that, along with the associated compliance determinations, monitoring, record-keeping, etc., provide practical enforceability for the emission data entered into the air dispersion model. These permit limits are inclusive of any transient emissions that may occur. It is also important to note that the only emission unit that may have any substantive transient emission deviation - of, in particular, CO, NOx or SO2 - is the Melting Furnace. The emissions of these pollutants from the Melting Furnace are continuously monitored and recorded using a Continuous Emissions Monitoring System (CEMS). Therefore, there is a direct link from the emissions data entered into the air

dispersion models and the practically enforceable emission limits in the permit. These emission limits are applicable at all times the emission units are in operation including periods of startup, shutdown, scheduled maintenance, etc. (with the exception of events defined as “emergencies” under 2.12 of the permit).

Comment 5: Q/D Calculation EPSC commented Q/D should be recalculated including transient emissions.

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DAQ Response: A Q/D analysis is a screening methodology developed by the Federal Land Managers (FLMs) - who are tasked with an affirmative responsibility to protect Air Quality Related Values (AQRVs) at Class I Areas - to determine when it is appropriate to require an AQRV analysis during a major source/modification permitting process. The calculation of Q/D is based on the methodology as given in the Federal Land Managers' Air Quality Related Values Work Group (FLAG) Phase I Report. The Q/D calculated by ROXUL was done according to this methodology. After providing the FLMs with the relevant information concerning the Q/D calculation and the permit application they, on January 18, 2018, notified the DAQ that an AQRV analysis was not required for the RAN Facility.

Comment 6: Curing Oven BACT EPSC commented that the Best Available Control Technology (BACT) Determination did not adequately consider or eliminate the use of Catalytic Combustion technology on the Curing Oven.

DAQ Response: ROXUL, in its BACT analysis, lists the afterburner's estimated VOC control efficiency range as 98-99% (pp 508 of 597 of the revised permit application) and states “[a]n afterburner is the top ranked control device and best option for achieving high VOC destruction efficiency [pp 510 of 597] . . .” The catalytic oxidizer is listed as the fourth option with an estimated control efficiency range of 90-99%. There is no evidence that a catalytic oxidizer would achieve in practice a higher destruction efficiency of the specific gas stream than use of an afterburner with a properly monitored firebox temperature (pursuant to 40 CFR 63, Subpart DDD, §63.1182). As the top-ranked control option, the DAQ believes the choice of an afterburner on the Curing Oven is appropriate.

Comment 7: PM-HAPs EPSC commented emissions of PM-HAPs such as mercury, arsenic, cadmium, and chromium were not evaluated as a potential result of use of such fuels as coal and pet coke.

DAQ Response: It is noted that ROXUL identified that the Melting Furnace is a potential source of mercury and arsenic emissions (pps 65, 66 of 597). Controlled emissions (the Melting Furnace is controlled by a baghouse) of these pollutants were estimated at amounts of 5.83 x

10-4 and 8.97×10^{-5} lbs/hour, respectively. The emission rates were based on performance testing from a facility in Denmark with a similarly designed furnace, as appropriately scaled to the RAN process. ROXUL, based on these performance tests, did not identify other PM-HAPs as potentially present at detectable levels in the exhaust gas of the Melting Furnace. It is also important to note that 40 CFR 63, Subpart DDD is designed to mitigate the emissions of PM-HAPs through the use of a surrogate particulate matter emission limit that is applicable to the Melting Furnace (0.10 lb PM per ton of melt 4.1.4(d)(1)(i) of the permit):

PM means, for the purposes of [40 CFR 63, Subpart DDD], emissions of particulate matter that serve as a surrogate for metals (in particulate or volatile form) on the list of hazardous air pollutants in section 112 of the Act, including but not limited to: antimony, arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium.

Further, in the required residual risk and technology review of Subpart DDD, USEPA stated that “[w]e retained the surrogacy of PM for non-mercury HAP metals because control of PM achieves the same level of control for non-mercury HAP metals, regardless of the concentration of those

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metals in the PM or whether the concentration of those metals varies in the PM.” (July 29, 2015 Federal Register - pp 45290)

Additionally, the mechanical transfer and handling of fuels and raw feedstock materials - which are also subject to BACT and well controlled using multiple enclosures and particulate matter filters do not produce regulated emissions of PM-HAPs. While constituent PM-HAPs may be present in some of these materials, they are bound within the matrix of the material and are not defined as HAPs until freed and released as finite particles during the combustion process. Particulate matter emissions from material handling are, however, subject BACT and are contributory sources in the air dispersion modeling used to show compliance with the National Ambient Air Quality Standards (NAAQS).

Comment 8: Odors EPSC commented that DAQ did not consider the potential for odors at the RAN Facility.

DAQ Response: West Virginia Legislative Rule 45CSR4 (it is unclear what rule you are citing as “State Rule 5.2”) is “designed to prevent and control the discharge of pollutants into the open air which causes or contributes to an objectionable odor or odors.” The rule, however, does not contain any quantified odor thresholds which define the threshold of an “objectionable odor” and, instead, §45-4-2.6 defines an objectionable odor in the following qualitative manner:

[I]n addition to odors generally recognized as being objectionable, an odor shall be deemed objectionable when in the opinion of a duly authorized representative of the Director, based upon his investigations or his investigations and complaints, such odor is objectionable.

Therefore, an objectionable odor must be determined by the DAQ in the course of an inspection or investigation of an actual odor, and it is not possible to prove quantitatively, pursuant to 45CSR4, that an objectionable odor will be present before a facility is in operation. Further, there is no qualitative indication that the facility - which is well controlled and contains extensive compliance demonstrations, monitoring, record-keeping, etc. - will produce any persistent off-site objectionable odors. If, consistent with DAQ policy, in the course of an inspection or compliant investigation, the DAQ determines that the operating facility is causing or contributing to an objectionable odor, the DAQ will take the actions as required under 45CSR4.

Comment 9: Missing Information on APCD Sheets EPSC commented that ROXUL did not fully fill out all the information on the Air Pollution Control Device (APCD) sheets including information that would indicate potential ammonia slip from the SNCR. DAQ Response: The Selective Non-Catalytic Reduction (SNCR) of NOx emissions from the Melting Furnace is, as described in the process description (pp 13 of 597), an integrated system that uses the basic design of the furnace itself, along with as-needed injections of aqueous ammonia, to control NOx emissions from the unit. The unit is not a "bolt-on" SNCR and, therefore, much of the requested information on the APCD is not applicable. Additionally, the APCD sheet filled out for the SNCR is general in nature and non-specific to de-NOx systems so that many of the boxes on the form are not applicable to a de-NOx system. And finally, due to the very long lead times required

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for air permitting within a pre-construction program, often design/engineering is on-going with permit application review. The DAQ understands that all the information specific to some equipment may not yet be available and is yet to be determined. This is acceptable as final emission rates can be analyzed and permitted with reasonable practical enforceability written into the permit. Specific to NOx emissions from the Melting Furnace, the permit requires the installation of a Continuous Emissions Monitoring System (CEMS) which will allow the real time monitoring of NOx emissions from the Melting Furnace to show compliance with the associated emission limit. Concerning the potential for ammonia slip from the Melting Furnace, it is noted that ammonia is not defined as a regulated pollutant under 45CSR13 or 45CSR14 and is generally not required to be monitored unless, on a case-by-case basis, as a performance indicator of the specific de-NOx system. This, however, is not required for the Melting Furnace as it is required to use a CEMS as noted above.

Comment 10: Formaldehyde Monitoring EPSC commented that a formaldehyde monitor should have been required.

DAQ Response: Substantive emissions of formaldehyde occur from two sources - volatilization from the melt during the collection/curing process (originating from the formaldehyde contained in the binder) and volatilization from the application of fleece (originating from the formaldehyde contained in the fleece binder). The emissions of the former are controlled, when emitted in the Curing Oven, by the afterburner. It is also expected that almost all formaldehyde in the fleece binder will be emitted in the Curing Oven and therefore destroyed in the afterburner. To be conservative ROXUL took no credit for control of the afterburner, which inflates the potential emissions from the fleece application.

Each process is covered by a federal MACT intended to identify and mitigate HAP emissions from certain source categories. The collection/curing process is applicable to 40 CFR 63, Subpart DDD: National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production. Specifically, the process is subject to a limit (§63.1178(a)) of 2.4 lb formaldehyde/ton of melt. The requirements of Subpart DDD include monitoring requirements for combined collection/curing operations [§63.1179, §63.1183], performance testing [§63.1188], notifications [§63.1191], recordkeeping [§63.1192], reporting [§63.1193], and General Provisions (NESHAP Subpart A).

The fleece application process is applicable to 40 CFR 63, Subpart JJJJ: National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. ROXUL will be subject to the requirements for new affected facilities under the standard, which include organic HAP (OHAP) emission limitations for web coating lines. ROXUL has chosen to comply with the emission standards by using "as-applied" compliant coatings pursuant to the procedures given under §63.3370(a)(2). This will limit the as-applied binder to a VOC content (VOCs are allowed for use as a surrogate for OHAP per §63.3370(c)(1) and (2)) of 0.016 lb-VOC/lb-binder. ROXUL's proposed binder will meet this requirement. Additionally, once constructed, ROXUL will be required to submit a notification for the startup of the Fleece Application line. ROXUL will also be required to submit a Notification of Compliance Status (NOCS) report for the Fleece Application (CM12, CM13) line in accordance with §63.3400.

Beyond the requirements in the MACT, pursuant to 4.3.2 of the permit, ROXUL will be required to conduct a performance test on emission point HE01 to determine the compliance with the emission limit for formaldehyde given under 4.1.5(a). Additionally, pursuant to 4.2.7, ROXUL

will be required to calculate and record on a monthly basis the actual amount of VOCs/HAPs emitted from the fleece application process. The amount shall be based on actual material properties and no control from the afterburner applied.

Based on the above reasons, the DAQ does not believe a formaldehyde CEMS is needed at the facility. It is also noted that ROXUL has stated their intent to use varying binder formulations as technology advances to produce formaldehyde-free resins.

Again, thank you for your comments. If you have any questions, please feel free to contact Mr. Joseph Kessler, the permitting engineer on this project, at (304) 926-0499 ext. 1219.

Sincerely,

William F. Durham Director

cc: Ed Maguire, DEP Environmental Advocate

ATTACHMENT 3

ROCKWOOL RANSON, WV INFORMATION SHEET
August 11, 2018

The government is subsidizing a high-pollution, global-scale factory on an apple orchard by The North Jefferson Elementary school in the middle of the state's most successful residential growth zone. That is a staggering policy failure, and will mark the end of Jefferson County as a clean and safe residential and agricultural community.

Rockwool Ranson, located between Kearneysville and Shenandoah Junction, will be the largest industrial facility of its kind in the world and operate 24/7. Its giant smokestacks-- the largest is 21 stories-- will redefine the County's skyline and create a health crisis for our public schools. If built, Rockwool will produce more toxic air pollution closer to more school children than any other manufacturing facility in the entire state of West Virginia.

WHAT WE KNOW

Rockwool will pollute the air on a scale unseen in Jefferson County

Rockwool will be a major source of at least nine different categories of air pollution that deteriorate air quality and harm human health. The plant's huge industrial furnaces and large-scale use of hazardous chemicals make it far dirtier than traditional manufacturing, and unlike any facility in the region.

Rockwool will emit cancer-causing chemicals

Rockwool will be West Virginia's second largest emitter of Volatile Organic Compounds (VOCs)-- that's #2 out of all significant polluting sites across the state.

The VOC payload includes 6 different known or suspected cancer-causing chemicals: Acetaldehyde, Formaldehyde, Biphenyl, 1,3-Butadiene, Naphthalene, and Benzene.

Rockwool pollution damages intellectual development in children

One of Rockwool's VOCs, Formaldehyde, is a neurotoxin that damages memory, concentration, behavior, and physical dexterity in children.

Rockwool pollution causes serious heart and lung damage

Hazardous Fine Particulate Matter (PM 2.5) is pollution that is inhaled and penetrates deep into the lungs. Rockwool will rank #10 out of several hundred polluting sites in West Virginia for PM 2.5 emissions.

Rockwool will produce haze, airborne grit, and smog precursors

Rockwool will be a major contributor to ozone (O₃) pollution, which exacerbates asthma in children.

Rockwool is situated to profoundly impact local schools

Although technically part of Ranson, the site is northeast of the Route 9/480 junction and as close to Shepherdstown as the center of Ranson.

Rockwool is directly across Route 9 from North Jefferson Elementary and is also within 10,000 feet of T.A. Lowery Elementary, Jefferson High School, and Wildwood Middle School, as well as two freestanding daycare centers.

These four schools comprise 2,744 students, or thirty percent of Jefferson County's entire student enrollment.

Again, there is no manufacturing facility anywhere in West Virginia producing this much toxic air pollution situated this close to this many school children.

Rockwool wrecks the county's school growth plans

Beyond the nearby schools, within a four mile radius of Rockwool are each of the county's two major land purchases on Shepherdstown Pike and Old Leetown Pike, as well as Driswood Elementary.

By way of comparison, there are no schools within four miles of Rockwool's Mississippi plant, and Rockwool Ranson will be more than 3 times larger than that facility.

Rockwool will degrade the visitor experience at Harpers Ferry

The plant's haze and smog will impact Harpers Ferry National Historical Park and its overlooks, just six miles away.

West Virginia is providing \$15-18 million in taxpayer financing for the site

State tax dollars are going to support a multibillion dollar foreign company in a commercial venture with no public purpose.

Rockwool will not bring significant job growth

Rockwool Group says the plant will create “approximately” 150 jobs but declines to provide any salary information or details.

While all jobs are important, to put 150 jobs in perspective, Jefferson County has 57,000 residents and 9,000 K-12 students who will be harmed by the facility.

Jefferson County doesn’t need Rockwool

Jefferson County is already growing rapidly with very low unemployment, and boasts by far the highest median household income in West Virginia. In fact, our income and unemployment figures are better than the U.S. as a whole. And our County’s population has grown 50 percent in the last 25 years, while the rest of West Virginia has actually declined.

Jefferson County is already working, and the way to create more good jobs is deeper integration with tech, government, and medicine in the booming DC metro region.

Rockwool will instead harm our economy by making our community a less attractive place to live, work, and visit. This Charleston-led model of subsidizing high-pollution industries has failed the rest of West Virginia and it will fail here.

WHAT WE DON’T KNOW

Unfortunately, Rockwool’s permit raises more questions than it answers, as it omits key data, relies on outdated demographic information, and doesn’t model the impact on nearby schools.

Hiding heavy metal pollution

There’s an entire class of hazardous air pollution at Rockwool that isn’t accounted for in project planning. An engineering review by the Sierra Club states that Rockwool “fuels and raw materials are known to contain numerous hazardous air pollutants, such as mercury, arsenic, cadmium, and chromium” that will be released into the air during plant operations.

There’s no disclosure or safety modelling of these pollutants, which can be extremely hazardous. We don’t know why WVDEP would issue a permit that ignores heavy metal pollution.

Rockwool uses outdated demographic data in their permit

Old 1992 data lets Rockwool Group ignore Shenandoah Junction and classify land use in the miles around the site as “less than 1% urban.” That would be a surprise to the thousands of people living, working, and going to school near the plant.

We don't know what impact using severely outdated data has on the overall permit assessment or why it was accepted by WVDEP.

Rockwool's permit excludes consideration of many common plant operations like startup/shutdown and maintenance

The permit takes a shortcut in the assessment of the overall pollution from Rockwool Rason. Rockwool Group should provide WVDEP and the public with information about air pollution from all phases of their plant's operations. We don't know the full potential pollution from this facility.

Huge new volumes of heavy trucking

The plant has loading docks with staging for 100 tractor-trailers. Heavy trucks will constantly import raw stone, slag, and other inputs, and truck out finished mineral wool. The trucking volume, routes, and pollution impact have not been studied.

Light and noise pollution

A 463,000 square foot industrial operation running 24/7 is going to generate a lot of light and noise (and probably odors). These impacts can be very serious for people living near the plant. There's nothing else close to this size and intensity in Jefferson County, and it will impact local quality of life and potentially even nighttime skies across the County.

Potomac River pollution

Contamination in the Potomac River often starts as airborne pollution. Given the river's importance to local drinking supplies, Rockwool's nitrogen and hazardous pollution impact needs to be evaluated.

What is next?

Clearly, no one thought this through.

It is urgent that Jefferson County officials immediately pause work at the site and conduct an independent review of the permit and plant operations, and in particular evaluate the impact on nearby schools. The WVDEP permit uses outdated data and is full of omissions, and further there has been no local presentation or input on Rockwool Ranson.

This is not how our local government is supposed to work. This facility may bring profound harm to our schools and will change life here for all residents; Jefferson County deserves a complete and independent assessment of Rockwool's impact on our community.

Sources:

WVDEP Roxul/Rockwool Permit Application

https://dep.wv.gov/daq/Documents/November%202017%20Applications/037-00108_APPL_R14-0037.pdf

WVDEP Preliminary Determination/Fact Sheet

https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/R14-0037_Preliminary_Determination.pdf

EPA National Emissions Inventory (NEI) Data (2014 most recent year available)

<https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>



June 8, 2020

To: Ranson City Council

In referencing the proposed Ordinance #2017-302 related to “Jefferson Orchards”, Mountaineer Gas Company, the largest natural gas distribution company in West Virginia, supports the develop of residential, commercial, and industrial opportunities throughout West Virginia by providing safe reliable natural gas services for the benefit of our customers and the communities we serve.”

Moses Skaff

Chief Admin. Officer/ Sr. Vice President

Stacey Pfaltzgraff

From: Alisha Smith <alisha.vaughan@icloud.com>
Sent: Monday, June 15, 2020 8:53 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I am Alisha Smith. I am 34 in October, I am raising five children in this neighborhood and will be FINALLY married here after saving and meeting our long strived after goals. I have read and very strongly agree with the following information and I ask that EVERYONE vote NO. We just bought our first home here in the Fox Glen neighborhood with our children last November. We came here to be away from the city and all its ugly pollutants and factories and warehouses. We worked harder than we ever have to make it here, regardless of how you may view this neighborhood it is OUR fresh start. It's where my kids can run in their backyard, swim in the pool we worked overtime for. Chase their dog they never thought they would have. We have plans here. We have hope here. I don't disagree bringing jobs and business is good, I'm saying you find land that isn't already in use for other purposes like raising children, or schooling them close to home to make those business and jobs. You cannot in good conscience decide that the health and well being of an entire neighborhood is outweighed by profit margins and revenue. I know I am not alone in this neighborhood when I ask that you stop and think about how this would effect you and your families, your children, if someone in a higher place of power, with a louder voice than yours decided to move these same industries to YOUR backyard. This land and this location are not appropriate for the industry this zoning change will allow. The hydrogeology of the land combined with such industrial activity risks the safety of our water supply. The air emissions from this industry will negatively impact our physical and mental health, our children's ability to achieve, our ability to make a living, our happiness, and it will do this for generations even after we leave or the pollution stops. It is not lost on us that this zoning change is being made next to our neighborhood and not next to the residents of Ranson, yet Ranson is in control. This is not right. We respectfully ask you to vote NO on ordinance #2017-302.

The land at the site in question is not just ill-suited, but completely inappropriate for the industry this zoning change will allow. This land has karst hydrogeology. As such, the ground itself is very unstable and readily develops sinkholes. This land has been described by a 2012 study to be exceptionally susceptible to sinkhole formation, more so than most of the rest of the county. Sinkholes provide point infiltration of surface water into the water in the epikarst. The porous bedrock allows diffuse infiltration of surface water into the epikarst water. At this site, there is also large amounts of water in the epikarst and it is only 60 feet from the surface. This allows the water at the surface to easily communicate with the water in the epikarst and the groundwater aquifer carrying any surface water contaminants with it.

The industrial activity this zoning change will allow for will cause ample surface water contamination from ground level industrial activities, raw material and waste storage and particulate matter falling to the ground from the air emissions. The industry that is currently planning to utilize this zoning change should be designated a stormwater hotspot just for this reason. The WVDEP should require them to treat all water before it is allowed to infiltrate the ground, but so far, this has not been done. The WVDEP actually recommends that areas like this not be developed due to the risk to groundwater. Their guiding document, Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that the best approach is to craft stronger comprehensive land use plans

that direct new growth away from karst areas to more appropriate locations.” This guidance should be followed; clearly we cannot expect the DEP to protect us from inappropriate zoning changes.

The wellhead protection area for the Fox Glen’s well and that of the elementary school where our children go to school intersects with the land where the zoning change is being proposed. However, a USGS study has shown that the groundwater aquifer here moves relatively fast and so contamination throughout this property is a concern for our water quality. This zoning change will clearly endanger the safety of our water supply. If the well at Fox Glen is contaminated and the utility is forced to divert water from further away, this may be used as evidence at the Public Service Commission to raise the water tariff on Fox Glen residents. This is an increase many will not be able to afford, raising the risk of water insecurity.

The air emissions that will be produced by the industry that this zoning will allow include gaseous (SO₂, NO₂, O₃ (VOC and NO_x)), particulate matter (PM₁₀, PM_{2.5}, PM_{0.1}), and hazardous emissions (neurotoxins and carcinogens). We will be exposed through our lungs from the air we breathe, through our skin from the air and things we contact, and through contaminated things we may ingest. Our kids will be more exposed because they spend more time playing outside and on the ground and kids like to put things in their mouth. In fact, according to the National Academy of Science, our kids are more at risk because they breathe more air per pound than adults, their detoxification pathways are less mature, they are growing and developing and these processes are more sensitive, and they have more years to live yet and thus more years to develop slow onset diseases. Exposure to air pollution in early human development, especially exposure to fine particulate pollution, can be extremely deleterious to children's health and development.

The negative effects start in utero. Embryonic and fetal cells are exquisitely sensitive and are affected directly by inhaled pollutants that cross the placenta like fine particulate matter as well as other secondary pathways causing impaired organ development, disturbed development of the immune system, premature birth, lower birth weight, and increased infant mortality. These early changes lead to long-term effects including increased disease development in multiple organ systems throughout life, cognitive defects, achievement deficits, and negative psychological social and economic effects.

Fetal and early life exposure to air pollution causes inappropriate brain growth and maturation in early life, neurodevelopmental disorders, early cognitive deficits, and has been associated with autism by several case-control studies. Several studies have demonstrated a scholastic deficit in exposed children for almost all subject matter and at a variety of grade levels. The cause of these findings are multifactorial and researchers suggested they include exacerbation of asthma symptoms, other decreased health parameters, increased fatigue, increased absence, or a direct neurodegenerative effect, all caused by or contributed to by the exposure to air pollution.

Development of the respiratory system starts in utero, is 80% complete by age 6, and continues to early 20s. A review by Korten et. al. in 2017 explained that exposure to air pollution during the first 6 years of life can damage the lung tissue, impair lung growth, and alter the development of immune function and repair mechanisms within the lungs. These effects increase both short- and long-term risk for asthma, chronic obstructive pulmonary disease (COPD), lung cancer, and respiratory infections. Exposure to outdoor air pollution not only increased the risk of these diseases, but exacerbates existing disease increasing severity of symptoms, hospital visits, and death due to these diseases. A 2019 study found “even within the limits set by the World Health Organization, the pollutants PM₁₀, SO₂, NO₂, and O₃ are associated with increased risk of treatment for respiratory diseases in children 0 to 6 years of age.” It is important to note that the US limits are set higher than the WHO, 300% higher in the case of PM₁₀!

There are a multitude of other physiologic effects of air pollution that cause increased rates of morbidity and mortality in both adults and children. Air pollutants are associated with increased risk of autoimmune diseases like asthma, allergies, and eczema. Air pollution has deleterious effects the cardiovascular system, endocrine system and blood, contributing to the occurrence of high blood pressure, high cholesterol, obesity, anemia, and stroke.

There are psychological effects as well. A review, of 178 published articles by Lu published in 2020, systematically examined the psychological (affective, cognitive, behavioral), economic, and social effects of air pollution and found:

"Affectively, air pollution decreases happiness and life satisfaction, and increases annoyance, anxiety, mental disorders, self-harm, and suicide. Cognitively, it impairs cognitive functioning and decision making. Behaviorally, air pollution triggers avoidance behavior, defensive expenditure, and migration as coping strategies. Economically, it hurts work productivity and stock markets. Socially, it exacerbates criminal activities and worsens perception of the government. Importantly, both actual and perceived air pollution levels matter."

Through negative physical and mental health effects air pollution has been shown to decrease an individual's productivity and ability to participate in the workforce, negatively impacting workforce availability and overall productivity. This negatively impacts individual workers, companies, and the local economy. It also decreases individual's ability to relocate themselves or their family into an area less affected by pollution. In this way a vicious cycle is set up where successive generations are exposed to the same pollutants and experience the negative effects of the ongoing exposure to pollution. This is not a fate the children of Fox Glen deserve to have thrust upon them by this zoning change and the industry that it will allow into our bucolic county. An editorial in the New England Journal of Medicine, commenting on several recent studies, stated: "The best control strategy from the standpoint of human health, supported by the scientific evidence to date, is to reduce the levels of all types of air pollutants. Our children's health depends on it."

The area surrounding the location, of the proposed zoning change that will accommodate heavier types of industry, is historically lower income and underserved. Deciding to locate a tract of such zoning in this location when is it on the whole unwanted and totally inappropriate for the land and surroundings is an example of environmental injustice. The Lancet Commission on Pollution and Health, citing the United Nation's Universal Declaration of 1948 on Human Rights, found that "pollution threatens fundamental human rights - the right to life, the right to health, the right to well-being, and the rights of the child." This rezoning represents not only a bygone era of economic development but a bygone era of environmental injustice and human rights violation.

The Lancet Commission on Pollution and Health further found that prevention of non-communicable diseases will require pollution prevention and that this will require fundamental changes in societal patterns of production, consumption, and transportation. This will require a paradigm shift to a more sustainable economic model based on recognition of human rights. They also found this is a major unexploited opportunity in society that many communities are grappling with undertaking. The movement away from the smart code zoning, with it integrated walkable communities, to large tracts of land dedicated to polluting industry close to a title one school is the exact opposite of this. This rezoning would represent a major step in the wrong direction for disease prevention, human rights, Ranson, and Jefferson County!

This change in zoning is not appropriate for this land and this area. This land itself is not well suited for the industry this zoning change would allow. This industry would severely adversely affect the health, safety and welfare of our community. Please vote NO on the Ordinance #2017-302.

--
Alisha Smith
alisha.vaughan@icloud.com
Kearneysville 25430



1290 W. Washington St., P.O. Box 707, Harpers Ferry, WV 25425
304-535-2582

Anvilrestaurant.com anvilrestaurant@gmail.com

June 18, 2020

City of Ranson
c/o spfaltz-graff@ransonwv.us

RE: Industrial zoning hearing for Rockwool project

To Whom it May Concern:

I urge the City of Ranson to approve the previously issued industrial zoning for the Rockwool project located at the prior Jefferson Orchards site. To date, the building project is in full swing and any changes would significantly affect the ability to finish this project in a timely manner and provide jobs in Jefferson County.

We have been catering monthly for the Rockwool site in the past year and have found the Rockwool staff to be kind, generous and a well-organized team. We have visited the site biweekly since the pandemic began to do a drop off at the gate and have observed many safety procedures being practiced keeping their employees and those visiting the site in place.

While I understand this is a decision for Ranson and I am a county resident, I hope that the City of Ranson will continue in its pro-business decisions for the greater good of the entire county.

Yours truly,
Ann M. Smith, owner

Stacey Pfaltzgraff

From: Renny Smith <rennyts@aol.com>
Sent: Wednesday, June 17, 2020 9:08 AM
To: Stacey Pfaltzgraff
Subject: Ranson Rezoning

CAUTION: External Email

I am so disappointed in the decision to turn a beautiful agricultural area into a factory complete with truck traffic and toxic fumes.

This project would be good news for almost any place else in West Virginia. Why you thought it would enhance our already prosperous County is a mystery to most residents.

We already have a good economy thanks to our natural beauty and our history. Why soil it?

I'm glad you have an opportunity to reconsider.
Please preserve the personality of our County.
Thank You,
Renny Smith

Sent from my iPhone

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: John Stefano <Johnstefano@mac.com>
Sent: Tuesday, June 16, 2020 11:34 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--

John Stefano
Johnstefano@mac.com
Charles Town 25414

Stacey Pfaltzgraff

From: Karen Stefano <karenstefano@icloud.com>
Sent: Tuesday, June 16, 2020 11:32 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

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The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--

Karen Stefano
karenstefano@icloud.com
charles town 25414

Stacey Pfaltzgraff

From: Catherine Stevens <devcat5@icloud.com>
Sent: Wednesday, June 17, 2020 9:29 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on #2017-302. The air emissions, possibility of ground and surface water contamination, and their effect on our interwoven economies threaten the health, safety and welfare of not just Jefferson County but the greater region, including Loudoun and the greater Northern Virginia area.

This zoning would provide for industry that produces large amounts of air emissions. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. Northern Virginia is directly downwind from these emissions. Much of the gaseous, fine particulate, and hazardous emissions can reach Northern Virginia. Further affecting the outdoor air quality of the adjacent portion of Virginia and the ability of these areas to achieve and maintain National Ambient Air Quality Standards (NAAQS) attainment. This will affect agriculture and outdoor leisure and recreation.

For example, Loudoun County has been in nonattainment for the NAAQS 8-hour Ozone standard for the past two years. VOC and NO_x react after they have been emitted to produce ground level ozone. The industry that this rezoning would provide for would produce large amounts of these emissions. This would make it even harder as Loudoun County tries to achieve attainment. As time goes on and the scientific research advances our knowledge and understanding of the extent to which gaseous, particulate and hazardous emissions affect human health the NAAQS standards are likely to be reduced. The effects on air emission from this rezoning will make it only harder for Loudoun and Northern Virginia to meet these standards.

In addition to the concerns about the air, the possible ground and surface water contamination is very concerning to Loudoun and Virginia residents. The site is known to have ground water that is vulnerable to contamination due to the karst hydrogeology. A USGS study demonstrated that the ground water adjacent to the site to be rezoned communicates readily with surface water tributaries of the Potomac River. In addition to direct infiltration where water moves directly from the surface to groundwater via porous limestone bedrock, karst is known to have severe ground instability problems. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater. This makes the aquifer vulnerability in karst areas very high, and contamination with industrial activity such as that provided for by this rezoning too likely. In this way, this zoning change will adversely affect the health and welfare of individuals and the community.

Loudoun sources its drinking water from the Potomac River, downstream of many West Virginia tributaries that carry water from the epikarst and groundwater aquifer at the site to be rezoned. Loudoun has recently completed the new Trap Rock Water Treatment facility, which draws water from the Potomac River. Loudoun currently provides 40 million gallons and projects to provide 90 million gallons of drinking water a day to customers by 2040 (<https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fLoudounwater.org&c=E,1,wMCKGAqOhAX4p9a5znn3FqFJY->

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

OBOGeYACiNjiCQzVfBo7aKJefVNatMTKm8yY-IcQL7KBonofLdunyx9SdNG9EQEKTAQbytjU3cyDIG-cLWxA3SzFF2izgsg,,&typo=1). Therefore, the viability of the Potomac River is a high priority for Virginia residents.

Loudoun and Northern Virginia is one of the fastest growing communities in the country and provides a lot to Jefferson County in their symbiotic relationship. Virginia residents support and enjoy Jefferson County through tourism, as our residents enjoy the natural and historical resources of your county. Virginia residents and businesses support the equine industry in a multitude of ways from providing wagering fans at the races to the Virginia Breeders Association Virginia Certified incentive programs and a strong market for retired racehorses. According to an economic impact study from WVU, at least 40% of Jefferson County residents travel outside of West Virginia for work, a good percentage of those travel to northern Virginia. This rezoning would allow for industry that would negatively affect the economy of both places and this relationship and the benefits for our residents gleaned from it.

This zoning change will provide for industry that will negatively effect the health safety and welfare of the Loudon and Northern Virginia community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--

Catherine Stevens
 devcat5@icloud.com
 Charles town 25414

Stacey Pfaltzgraff

From: Terri Storer <terristorer@gmail.com>
Sent: Wednesday, June 17, 2020 3:48 PM
To: Stacey Pfaltzgraff
Subject: I SUPPORT ROCKWOOL

CAUTION: External Email

I support Rockwool. I do not wish to speak on behalf of my support however I look forward to this company employing locals.

Terri Storer
Jefferson County

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Bill Strider <whstrider@gmail.com>
Sent: Sunday, June 14, 2020 2:36 PM
To: Stacey Pfaltzgraff
Subject: Support for the passage of City of Ranson Ordinance #2017-302

CAUTION: External Email

As a resident of the City of Ranson, I offer my support for the passage of Ordinance 2017-302 on or after June 23, 2020. To this end, I offer the following justification for my support:

1. The Ranson City Council clearly made the zoning change via Ordinance 2017-302 for Rockwool on the property known as Jefferson Orchards in 2017. The zoning change was made with the understanding that it was in compliance with its Comprehensive Plan.

2. Mayor Pierson and Judge Hammer have identified and acknowledged the "administrative error" regarding public notification and the City has agreed to exercise the Judge's decisions and recommendations.

3. It is important to point out that three years have passed since Ordinance #2017-302 was approved by the Ranson City Council. Based upon the presumption of vested rights inherent in the zoning amendment change in 2017, Rockwool moved forward with permitting and construction of its new facility. This investment included a water distribution line to the Jefferson Orchards site which will provide significant excess capacity well beyond the needs for Rockwool. In addition, the State of West Virginia and Rockwool designed and financed a sewer transmission line with sufficient treatment capacity from the Charles Town Utility Board. The sewer line is currently under construction with completion expected by October, 2020. Jefferson Orchards now has the necessary infrastructure to accommodate desired industrial development under ordinance #2017-302.

4. Jefferson Orchards is located within 1.5 miles of Jefferson County's Burr-Bardane Industrial Parks which will benefit through direct access to the water and sewer lines cited above, thus enhancing economic development opportunities for the entire community.

5. With the above noted investments Jefferson Orchards is much more suited for the new zoning classification under ordinance #2017-302 today than it was in 2017.

I appreciate the opportunity to provide my public comments.

With my best regards,

Bill Strider
 904 Currie Road
 Ranson, West Virginia 25438-5717

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: msullivanwv@gmail.com
Sent: Wednesday, June 17, 2020 10:15 AM
To: Stacey Pfaltzgraff
Subject: RE: proposed Ordinance #2017-302

CAUTION: External Email

Hello Stacey,

I sent the letter below to individual council members vis regular mail. I will not be able to attend the public hearing but I will appreciate it if the letter is placed in the record.

Thanks.

Mike Sullivan

June 12, 2020

Letter to Ranson City Council

RE: proposed [Ordinance #2017-302](#)

I am a frequent visitor to Ranson and the many businesses along Route 9 and elsewhere in Ranson. I also use the bicycle trail along Route 9 through Ranson on a regular basis. I am opposed to this ordinance. I enjoy pedaling in relative clean air – air that is unfouled by heavy industry. I would have expressed my opposition to Rockwool and the zoning change earlier if the initial process in 2017 had been more open and less secretive. The residents of Jefferson County who are largely opposed to Rockwool and this ordinance deserve to be heard.

I realize that the current hearings are about the zoning change. However, as a practicing hydrologist, I would be remiss if I didn't express my concern about the potential dangers and environmental harm that is likely to occur by allowing heavy industry with settling ponds to be sited in karst topography with numerous sink holes, fissures, and underground streams.

Sincerely,

Michael Sullivan
 1273 Steamboat Run Rd
 Shepherdstown, WV 25443

304 876-1343
msullivanwv@gmail.com

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

1

Ranson Hearing June 2020 Ordinance ordinance, #2017-302

THIS STATEMENT IS INDIVISIBLE FROM THE MENTIONED THREE REPORTS PREVIOUSLY SUBMITTED AND RECEIPT OF CONFIRMED. - JS

My name is Jim Surkamp, P.O. Box 1035, Shepherdstown, WV
I have lived here since 1983

I.

Referencing my document submission on equine harm: six pages:
Industrial smokestack emissions annually by the hundreds of tons pose a direct threat to the \$159 million dollar, 3450-employee equine industry here that will be a hundred years old in 2033.

The up to 1448 thoroughbreds, stabled at the race track, train and exercise so powerfully that the intake and exchange of contaminated air is ten times the volume of a human. Tons - 24X7 of particulate matter a tiny fraction the diameter of a human hair would flow on the northwest prevailing wind path from the industrial site. This fluffy cloud goes furthest into the horses lungs and remains, degrading the thoroughbred's racing times, health. Seeing the threat owners and breeders will, understandably, take their business to Laurel Park as a measure of caution. Re-affirm the original height restrictions in the 2012 comp. plan, because the exception made to allow 210-foot smokestacks violates the comp. plan's goal to keep out industry harmful to health to school children and other adjacent property owners.

II

Reference my submission on sinkholes: four images and three pages

Any industry that persists in trying to build a 400,000 square foot facility with huge holding ponds atop a terrain with repeated ground collapse, sending contaminated wastewater into the sub-surface drinking water of eighty per cent of the county's residents - faces grave liability. Especially if the checking for leakage in the ponds is so time-consuming and costly that such checking tends to be rationalized. Note the fine to the industry there in October, 2018 for failing to report sinkholes, one large enough to swallow up a school bus.

I doubt the word "sinkhole" ever appears within the consulting report of Thrasher Engineering

The rezoning should be a vote to revert to the original 2012 plan with provisions requiring extensive and independent evaluation of the sinkhole problem, before building permits are re-issued on the suitability of this sinkhole plagued location for a large facility.

2/Surkamp , #2017-302

III

Referring to my submission regards historical resources: part 1, five pages and part 2, 25 pages

Rockwool's consultants, under formal signed-off-on conditions of secrecy and no public review, studied and reported on the viewshed impact of the 210 foot smokestacks of the plant, but failed to note and report that those smokestacks would be seen in the viewshed of two major federal National Historic Parks (Harpers Ferry and Antietam) and from four vantage points along the federally maintained Appalachian Trail, according to a professional GIS analysis

The use of federal funds that paid for the foundational comprehensive plan of 2012 for the City of Ranson by Placemakers, legally binds the City and the affected parties owning the site to conduct at the landowner's expense a complete Section 106 Phased Historical Resources review with a report submitted to the City, the JCHLC and the State Historic Preservation Office. The submission constitutes much of a Phase 1 study, demonstrably the existence, in fact, of considerable resources needing protection, and must be included in the Section 106 process

Phase 1 of this review need only be an evaluation and expanding of the considerable documentation provided in this fully documented report showing that:

1. NATIONAL EVENT: The property was the site of a Civil War event in October, 1864 of lasting national significance called The Greenback Raid in which Mosby's raiders stole \$173,000 period dollars from a train on the property in question in the hearing at a location called Quincey's Siding.
2. HISTORICAL PERSONAGE OF NATIONAL SIGNIFICANCE: The site entirely falls within land purchased in the 1750s by Adam Stephen, a Revolutionary War major general, George Washington's executive officer for twenty years prior, and a pivotal delegate at the Virginia Secession Convention for ratifying the federal Constitution. Stephen was the vocal leader of the sixteen delegates from western counties that provided the winning margin for the passage of the Constitution, hence the proposed nation was assured
3. ARCHITECTURAL INNOVATION: The site includes part of the original lands of Hazelfield - of great architectural significance, according to John C. Allen, author of "Uncommon Vernacular: The Early Homes of Jefferson County," because it was the first manse to have a transverse hallway plan, the first in the larger region to have that feature.
4. CEMETERIES: The formal review must include a review of evidences of two related cemeteries within a cemetery area with over a hundred markers and neglected burial sites. These must be in the Section 106 review including the work and research submitted by Addison Reese, Aaron Lennox and Jennifer King to constitute much of Phase 1.


3/Surkamp, #2017-302

Ranson in the past fifteen years has been a leader and a city with a vision that I think was poorly served. Thank you

Jim Surkamp

Equine Industry at Dire Risk by Jim Surkamp (1/7 pages)

Hundreds of tons of microscopic particulate matter carried by the prevailing winds from the proposed Rockwool plant from the northwest in the direction of 1448 stables for racing thoroughbred horses will, over time, destroy a local equine industry, that is worth \$159 million and 3450 jobs, by destroying the thoroughbreds, and also by making racing here inhospitable to horse owners and breeders.

AIR QUALITY PERMIT NOTICE		
Notice of Application		
Nitrogen Oxides (NOx): 239 tons per year	 <p>90 tons of coal burned daily</p>	Formaldehyde (HCHO): 67.6 tons per year
Sulfur Dioxide (SO2): 148 tons per year		Carbonyl Sulfide (COS): 1.7 tons per year
Carbon Monoxide (CO): 74.1 tons per year		Hydrogen Flouride (HF): 1.7 tons per year
Volatile Organic Compounds (VOCs): 470 tons per year		Hydrochloric Acid (HCL): 1.3 tons per year
Filterable Particulate Matter (PM10): 129 tons per year		Hexane (C6H14): 0.3 tons per year
Particulate Matter <10 microns (PM10): 154 tons per year		Benzene (C5H6): 0.1 tons per year
Particulate Matter <2.5 microns (PM2.5): 134 tons per year		
Carbon Dioxide Equivalents (CO2e): 153,000 tons per year		
Sulfuric Acid Mist (H2SO4): 16.4 tons per year		
Lead (Pb): <0.01 tons per year		
Total Hazardous Air Pollutants (HAPs): 393 tons per year		
Mineral Fiber HAPs: 113 tons per year		
Methanol (CH4O): 104 tons per year		
Phenol (C6H5O): 98.9 tons per year		
<p>RANSON is a HAPPY Place without - Rockwool</p>		<p>By: Roxul USA, Inc. Ken Cammarato Vice President and General Legal Counsel 4594 Cayce Road Byhalia, MS 38611</p> <p>Startup of operation is planned to begin on or about October, 2019</p>

page 1 Ranson Hearing June 2020 Surkamp harm particulate matter horses

The Economic Impact of the Thoroughbred and Greyhound Racing Industries on West Virginia's Economy 2012, pp. 50-53.

<http://cthbpa.com/resources/economic-impact-study.pdf>

Randy Funkhouser – horse breeder, past president of the CTHBPA
Christine Wimer – MS, DVM, DACVS-LA - Equine veterinarian and board-certified surgeon
Prof. Michael McCawley (PhD), School of Public Health WVU

"Wind Behavior in the Eastern Panhandle, Sept., 2019 update" – David Michael Glenn, PhD University of Guelph. "Airway disease in racehorses more prevalent than previously thought." ScienceDaily. 11 April 2018. (Based on state-mandated of 96 thoroughbreds racing in the vicinity of Rockwool's mineral insulation plant in Milton, Ontario. A plant and operation very similar to the one proposed here.

www.sciencedaily.com/releases/2018/04/180411110949.htm

Fe ter Woort, Jeff L. Caswell, Luis G. Arroyo, Laurent Viel. Histologic investigation of airway inflammation in postmortem lung samples from racehorses. American Journal of Veterinary Research, 2018; 79 (3): 342 DOI: 10.2460/ajvr.79.3.342

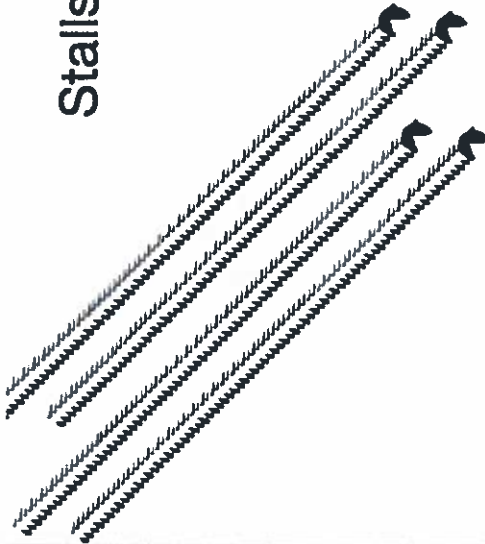
Roxul USA Air Quality Permit Notice Spirit of Jefferson November 22, 2017 of listed hazardous emissions of the proposed plant



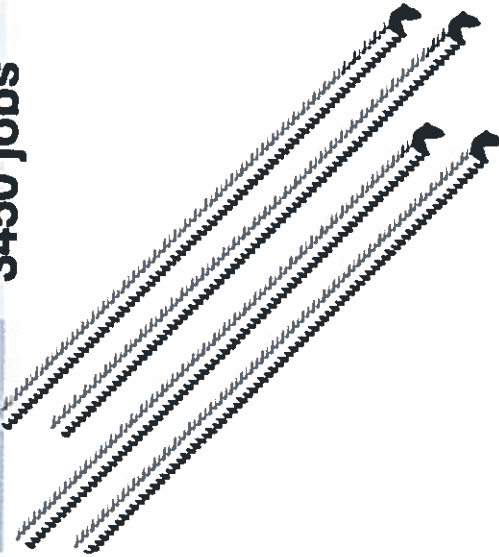
According to equine veterinarian Christine Wimer: “Any animal exercised at high intensity breathes air deeply into the innermost recesses of their lungs. Taking these tiny particulate into these deepest recesses and because they are so small the mucociliary apparatus cannot adequately trap and prevent them from traveling to the deeper lung parenchyma. This causes respiratory inflammation for the horse, impacting their racing speeds and race recovery times, and predisposing them to further disease and injury. This shortens or finishes their racing career, the owner’s livelihood and the animal’s quality of life.”



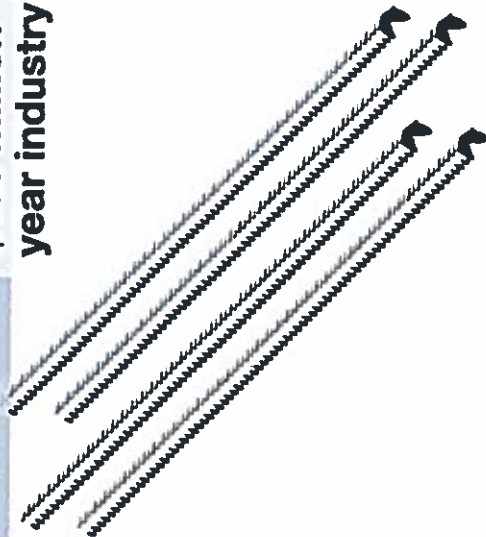
Stalls for 1448 thoroughbreds



3450 jobs



\$159 million
year industry





Sought industrial site (Rockwool)

Dangerous emissions in the prevailing winds
70 per cent of the time, 5+ mph wind currents
carry clouds of extremely harmful and tiny
particles, filling the air and lungs of living things
in and around Ranson, Charles Town and
the racetrack, emissions that, in a year,
weigh at least 72 tons.

using data from WVDEP's FRM-standard air quality monitor in Martinsburg



Northwest

Kearneyville

Shena Junc



Milville

Southeast

Ranson

Charles Town



Loudoun County Equine Alliance

Serving The Loudoun County Equine Community

September, 2018

The Loudoun County Equine Alliance (LCEA) shares your concerns about the construction of the Rockwool manufacturing facility in Ranson, WV. We thank you for requesting that our county take a closer look at this project and examine options for action. We are working within the Loudoun equine industry to obtain more information on the potential effects here.

Our concerns are:

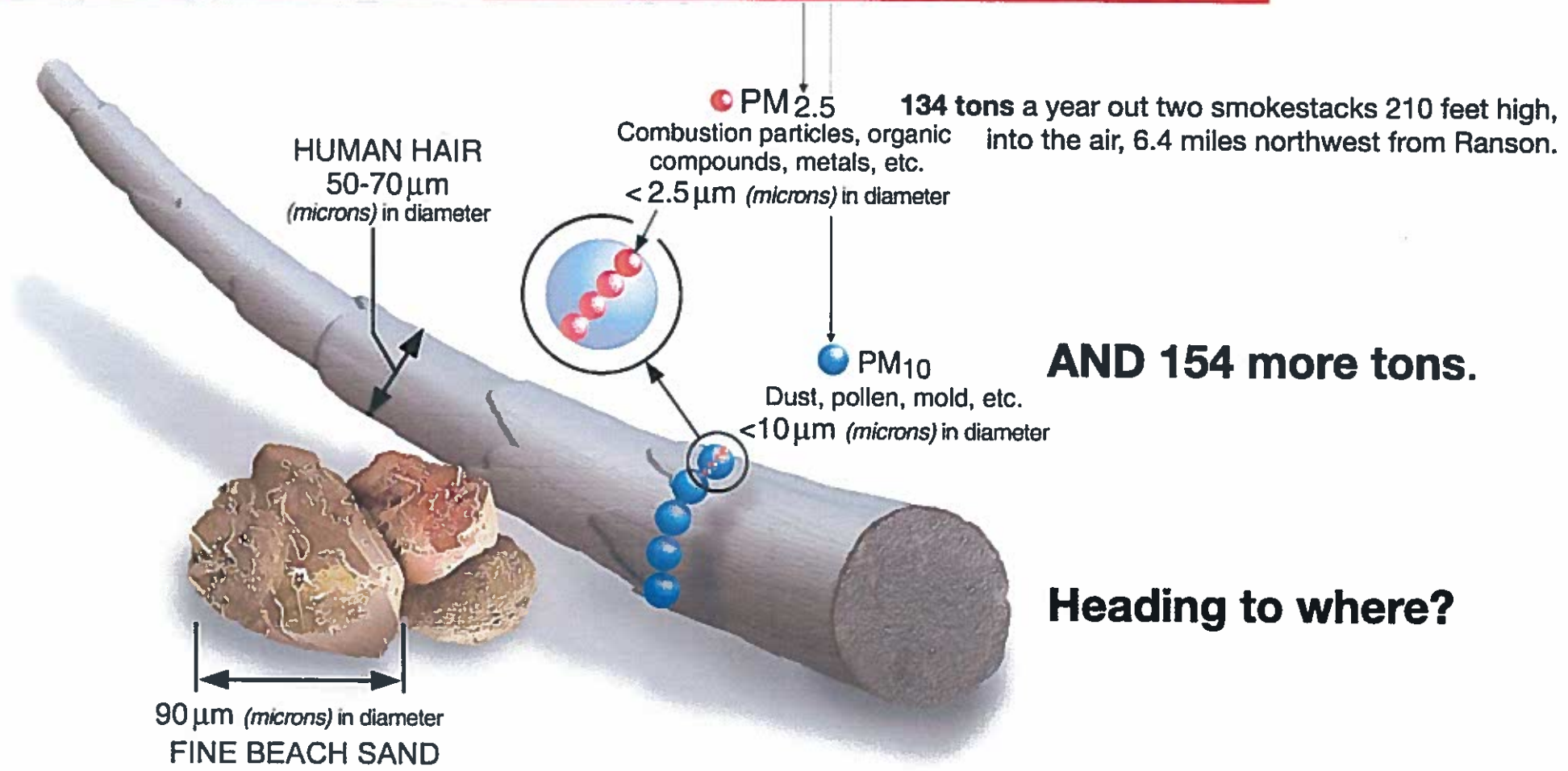
- **Air quality for horses and riders, especially those performing at highly aerobic activities** such as those in training for competition for various horse sports, as many horses in Loudoun County are. We are making inquiries among our equine veterinary community, including veterinarians at the Marion duPont Scott Equine Medical Center, to gather specific data on this subject.
- **The subsequent effects on Loudoun's equine industry if detrimental effects from the plant are established or even perceived by the public.** These could include loss of horse population, reduction of attendance at competitions, reduced value of horse properties, and the subsequent harm to businesses that support the equine industry, such as hay producers, feed suppliers, veterinarians and equine hospitals. The equine industry in Loudoun has been shown to have an annual economic impact of \$181 million per year.
- **The spillover effects on Loudoun's equine industry of the plant's harmful effects on the Thoroughbred racing industry** in our area. The racetrack at Charles Town has been calculated to have an annual economic impact of over \$191 million in Jefferson County (WV) alone, and is the only Thoroughbred racetrack in the region. (There are currently no operating Thoroughbred racetracks in Virginia.)
- **The negative impact the Rockwool plant could have on all sectors of Loudoun's rural economy** (vineyards, B & Bs, agricultural producers, etc.) which are all dependent on beautiful vistas, clean air, excellent growing conditions, etc., and are interdependent on each other.
- **The potential for this Rockwool installation to become the first of many heavy industrial uses** in an area within close proximity to our precious rural countryside.

Again, we appreciate and support your efforts to examine the issue of Rockwool's potential impact on our county.

Sincerely,

Kelly Foltman, DVM, LCEA President
 Michelle King, LCEA Vice President
 Marion Lee, LCEA Secretary
 Stephanie Jennings, LCEA Treasurer
 Louise Cotulla, LCEA Board Member
 Emily Houston, LCEA Board Member
 Christie Kimberlin, LCEA Board Member
 Tori Sullivan, LCEA Board Member
 Janet Vandervaart, LCEA Board Member

Particulate Matter <10 microns (PM10): 154 tons per year
Particulate Matter <2.5 microns (PM2.5): 134 tons per year



https://www.epa.gov/sites/production/files/2016-09/pm2.5_scale_graphic-color_2.jpg

page 3 Ranson Hearing June 2020 Surkamp harm particulate matter horses

"Airway disease in racehorses more prevalent than previously thought."

Fredericka ter Woort, Jeff L. Caswell, Luis G. Arroyo, Laurent Viel. Histologic investigation of airway inflammation in postmortem lung samples from racehorses. American Journal of Veterinary Research, 2018; 79 (3): 342 DOI: 10.2460/ajvr.79.3.342

Rockwool mineral insulation plant

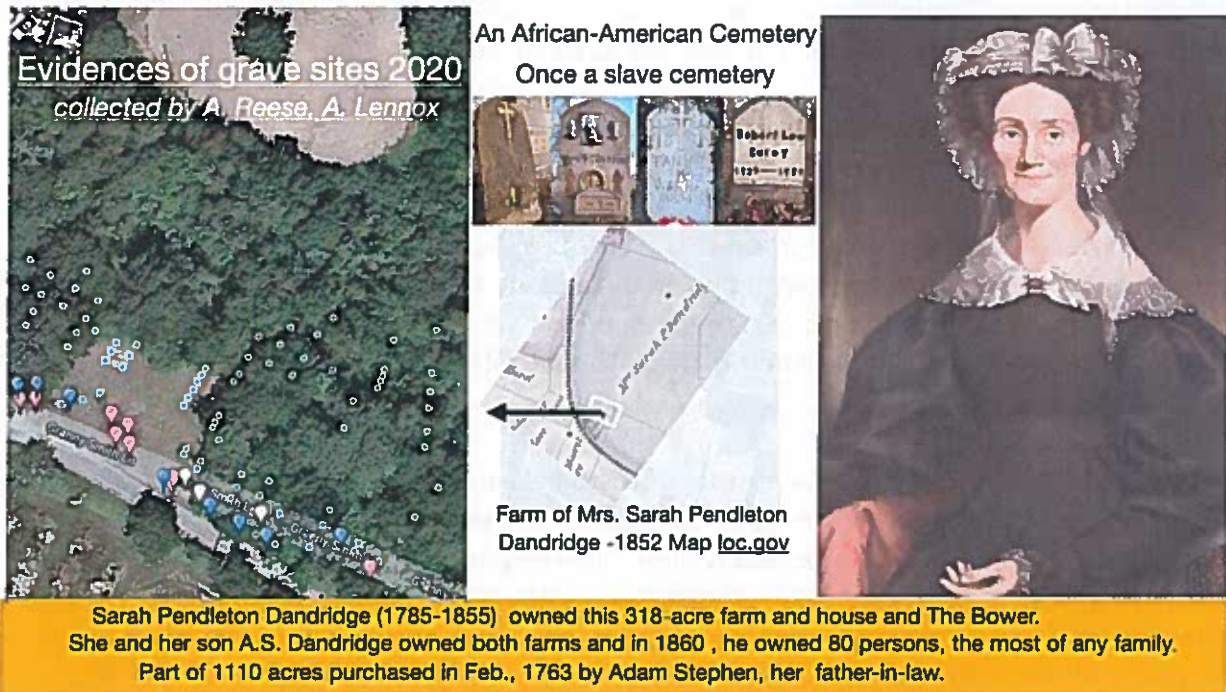
Milton, Ontario, like the one planned here



Is deep inhalation by exercising/racing thoroughbreds of Rockwool particulate matter a genuine threat to the \$159 million equine industry here? Yes.

Respiratory disease traceable to pollution and dust were found in autopsies of 95 racehorses located in the vicinity of Milton, Ontario - the location of Rockwool's mineral insulation manufacturing plant - like the one they want to build here.

Ranson-Hear-June-2020-Surkamp-History Review 5 pages - p. 1



The City of Ranson should consider making a formal request to the WV State Historic Preservation Office (WVSHPO) to form a committee, as stipulated by law, to investigate and protect, even if by means of legally supervised disinterment and relocation of endangered burial sites – a historically-significant “cemetery area” part of which is within the property owned by Rockwool.

These steps are warranted for two reasons. The City of Ranson used federal funds in the form of HUD-EPA Tiger grants to pay largely for the City's Comprehensive Plan, prepared in 2012 by Place-makers, within which there is the first smart code formulation of the Jefferson Orchard site and because that formulation and its smart code zones were required to document and demarcate the parcel presently zoned industrial and being built upon by Rockwool. This 2012 plan, which was almost entirely copied into the 2017 Plan prepared by Gordon Associates, but the Gordon Associates' recapitulation more specifically designates as the "SDI industrial" section, the portion that Rockwool is currently seeking to build its mineral rock insulation plant. (Andy Blake email to Mr. Ralston 2018)

Secondly, because Rockwool's construction, only made legally possible by using, as its framework, the above federally-funded plan for the vote to rezone the property and allow Rockwool's construction effort, the federally-funded nature of Rockwool's endeavor means that the above-described cemetery area with well-documented historical significance (attached), must undergo a Section 106 Phase I and Phase II Archeological Site Review of the cemetery area at Rockwool's expense and with an archeologist it selects. The City of Ranson should recommend that the archeologist work with full transparency with the Jefferson County

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Historic Landmarks Commission, and adjacent property owners. The JCHLC would also vote to approve the final report, using factual accuracy as its sole criteria.

While the Phase I Site Review, as described in federal law and rules, is meant to determine the existence (or not) of a threatened cemetery or historical resources of local, regional or national significance, the abundance and factually-supported history at the site in question and presented herein fulfills all those criteria, such that the archeologist's Phase I work would be largely checking, validating and expanding on the already completed research and investigation and moving to Phase II to undertake more in-depth on-site investigation even possible mitigation and removal (not done in the original historical resources study by Rockwool's consultants).

Rockwool has not demonstrated a posture of custodial care as is required by West Virginia law regarding cemeteries, reflected in a plan to widen the Granny Smith Lane, extremely closely abutting the official part of the cemetery area called Boyd Carter Cemetery. In its VPR study, it was written that "A small cemetery is located immediately west of the Site. Materials, including formaldehyde and metals may have potentially leached from the cemetery onto the Subject Property. Based on the threat of material release, the cemetery is considered to be a REC." (VRP 17031 Jefferson Orchards VPR Application (6-20-2017)-10.) These statements suggest a willingness to do harm to the cemetery area.

The scant, assembled information of historical resources produced by ERM was because the public and its historians (adjacent property owner William Howard Adams, foremost Jefferson scholar) were not engaged for their knowledge because the agreement to do the resources study was a signed "confidential undertaking." His daughter Sarah Adam's inquiries were repeatedly ignored by Mr. Blevins at SHPO apparently because of this gagging. Almost all historic resources of real significance were missed and their existence unknown. Even the ERM study's author suggested more work needed to be done.

James T. Surkamp historian: Colgate U. BA 1971 American history; Worked as researcher from 1976-1982 for American Heritage Magazine, NYC; compiler of the James Surkamp Collection, a fifteen-box set of xeroxed original documents depicting how art was looted by the Nazis in World War II and later used by the Clinton Administration to recover lost paintings. The collection resides at the YIVO Institute for Jewish Research in NYC; Creator of 400 videos on you tube giving researched stories on the region's history along with 1.5 million words of content at websites about Adam Stephen, Danske Dandridge, Martin Delany, R.J. Funkhouser, the Washington Family, justjefferson.com, and civiwarriors.com; author of the book "A People's History of Jefferson County: The Land Where We Were Dreaming"; content creator for nine years and continuing in partnership with American Public University Systems, called civilwarriors.com; co-author with Shepherd Professor Charles Hulse in 1991 of "The 1990-91 Jefferson County, West Virginia African-American Cemetery Survey"; received the Letter of Commendation from the West Virginia Archives; received in 1998 a Silver Angel Award for

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"moral excellence in the media" for an hour-long factually true docudrama broadcast nationally over NPR about a man struggling with his experiences in Vietnam, endorsed by Film Director Oliver Stone; received the \$3500 Media Arts Fellowship from the West Virginia Arts Commission mid-1990s.

SOURCES:

Guidelines for Phase I, II, and III Archaeological Investigations and Technical Report Preparation - Prepared by the West Virginia State Historic Preservation Office

Written by Patrick Trader - Edited by Joanna Wilson

<http://www.wvculture.org/shpo/techreportguide/guidelines.html>

WV Code §29-1-8a provides protection for human burials and burial sites of historic significance, including unmarked graves, grave artifacts and grave markers. ***Cemeteries must have archaeological or historical importance to fall under the protection of this law. Penalties are assessed for excavating, removing or otherwise desecrating such burials without the permission of an ad hoc committee convened at need by the State Historic Preservation Office. ***Both misdemeanor and felony charges may result, and conviction carries fines up to \$5000 and/or prison terms.

<http://www.wvculture.org/shpo/cemcodes.html>

Get Outlook for JDS Andy Blake to Jeff Orchards rep Ralston re federal funding source for planning

From: Andy Blake
Sent: Monday, May 14, 2018 6:11:14 PM
To: Mark Ralston; Nic Diehl
Cc: Edward Erfurt
Subject: Jefferson Orchards

Good afternoon Mark:
Nic has informed us that you are coming to town next week and would like to meet. You had mentioned that you were coming to town. We will make ourselves available. I think it would be most productive if we had an agenda of what specifics you would like to speak about to make it productive. I see a couple of issues as we have previously discussed:
1. Northern orphaned parcel. This parcel is now part of Rockwool so that the northern piece isn't orphaned with the intent to be deeded back to the Orchards. This parcel needs to be merged with your newly acquired piece through a merger plat. It then can be rededicated back to the Orchards. The newly acquired piece should be annexed. This is a simple process that requires your consultants to simply turn in the application and required paperwork.

2. Planning - As you know, in 2012, Jefferson Orchards was selected for a complete rezoning and land development plan free of charge to the landowner through a federal and local HUD Challenge Planning Grant. The site was envisioned and planned as a transit oriented development with about a 1/3 zoned special district industrial. This is the zoning that Rockwool took advantage of and probably consisted of about \$100,000 in free planning that resulted in a completely vested and approved plan by the Planning Commission and Council. It's the plan that still exists today. There has been an expressed desire by you to allow industrial on the entire remaining parcel. While this may be possible with an ordinance change, zoning is just one aspect of the two step planning process within the City. The City requires underlying zoning plus a land development plan. The land development plan is the vested land use document that goes to public hearing and sets out road network, utility corridors, environmentally sensitive areas, land use, utility, best land use analysis. The best example of this is your own land development plan. Simply, it requires a vision - providing enough flexibility to allow uses while setting up some certainty and flexibility. There are planning firms across the country that focuses on this type of development and process. The same type of process needs to occur again if you plan on re-annexing the property to another plan.

While the City isn't able to pony up additional funds to once again plan Jefferson Orchards, we learned last week that the City does have the ability to apply for 2 grants that could plan the Orchard and surrounding site. Our consultant is currently writing a summary of the process for applying for these grants. One grant is through the US EPA up to \$300,000 to conduct a market study and land planners plan the Orchards, Tackley Mill, Blackford Village presenting a fully vested plan that is publicly vetted and development ready. This grant has a rolling deadline and does require a match.

The City would be willing to administer this but would be looking for a monetary contribution by the land owner(s). The second grant is called BUILD (formerly TIGER Planning Grant) which could be applied for to design and engineer the rest of the road, bike path and the train station (if it is found feasible by the market study and analysis). I have spoken to City Council and the Planning Commission about this area. They are open to ideas, but consistent with our land use regulations, it requires a plan. The Council would like to see a holistic approach that takes into consideration your land along with surrounding properties. It's almost 1,000 acres of land. Some properties could be ripe for larger scale manufacturing. Other areas not so much - which can serve as support uses for the larger scale manufacturing. The Council (along with myself) isn't necessarily keen on calling the area an industrial park especially given the City's two decade history of cleaning up turn of the century dirty industrial sites and the fact that development patterns that focus solely on industrial parks have changed in the last 20 years. The Council is very much accommodating to high tech and clean manufacturing and research - like Rockwool and the potential user to Rockwool's north - along with other compatible uses. But, to put it as simply as we can, we need a solid vision and plan.
Many thanks
Andy

B014626

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Confidentiality

ERM and our subconsultants will observe the Clients procedures on confidentiality. A confidentiality agreement will be signed by all involved consultants and subcontractors.

Liability and insurance coverage

ERM and associated subconsultants will provide Client with applicable certificates of insurance coverage.

Terms and Conditions

The performance of the services described herein shall be governed by ERM's terms and conditions dated May 2, 2017. Terms for payment are net 30 days.

Closing

ERM sincerely appreciates the opportunity to provide you with these professional consulting services. You can authorize this proposal by signing below and returning a copy of the proposal to us or issuing a Purchase Order. If you have questions concerning this proposal, please do not hesitate to contact me at (304) 757-4777 ext. 101 or by email at david.carpenter@erm.com.

Authorized By Principal-in-Charge:

Client Approval By:



Signature

Signature

FR17-437 JF Granny Smith Lane, Kearneysville Also Known as Rockwool Roxul May 2018

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

3.3 Community Unit Types

3.3.2 Village (VL)

- a. A village (VL) shall be permitted within the G-2 Controlled Growth Sector, the G-3 Intended Growth Sector, and the G-4 Infill Growth Sector.
- b. A VL within the G-3 Controlled Growth Sector and the G-3 Intended Growth Sector shall be enclosed by one (1) street standard as linear pedestrian shed and shall be no fewer than 40 acres and no more than 200 acres, as allocated on Table 2. See Article 4 for Infill VL acreage requirements in the G-4 Infill Growth Sector.
- c. A VL shall include Transit Districts as located on Table 3.
- d. Larger sites shall be designed and developed as multiple communities, each subject to the individual Transit District requirements for its type as allocated on Table 3. The simultaneous planning of adjacent parcels is encouraged (Village Medium Intensity 152 G).

3.3.3 Special District

Special district designations shall be assigned to areas that, by their intrinsic size, use, or configuration, cannot conform to the requirements of any Transit District or combination of districts.

3.3.6 Industrial Special District (SDI)

- a. SDIs are available for industrial and manufacturing areas.
- b. SDIs are limited to a maximum size of 200 acres.
- c. SDIs may be mapped adjacent to villages and town center community centers.
- d. SDIs should be mapped within or adjacent to a TOD overlay district.

3.3.4 Transit Oriented Development (TOD)

- a. Any VL or SCT on an existing or proposed MARC or bus rapid transit (BRT) network may be redesignated in whole or in part as TOD and permitted the reduced parking allowances in Section 5.3.3.4.

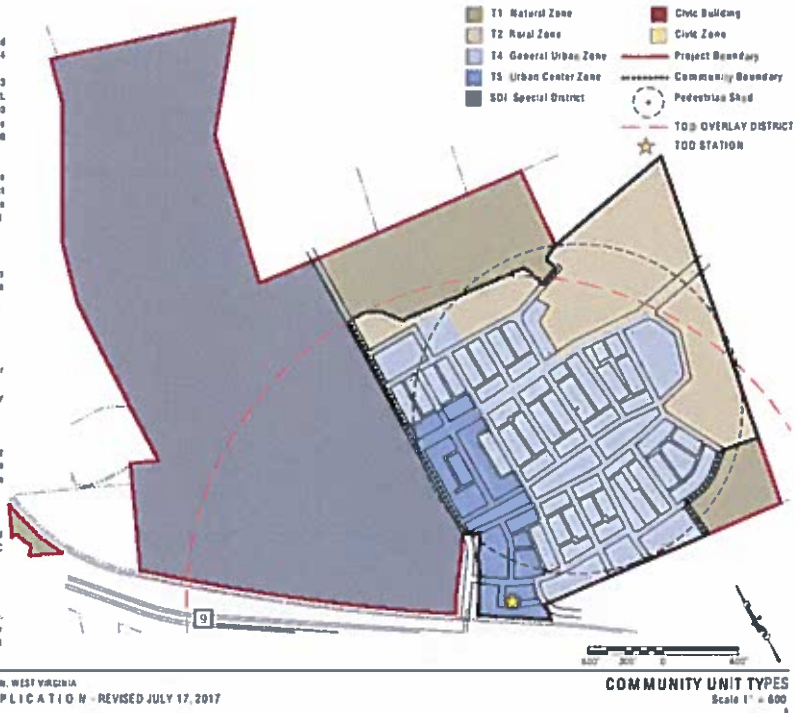
3.10.1 TOD Overlay District

- a. A new community regulating plan must designate any land located within a half-mile of an existing or proposed MARC station as a TOD.
- b. TODs usually require parking as provided in Article 5.

NorthPort Station Feasibility Study

A feasibility study prepared by Michael Baker Jr. Inc. dated June 16, 2015 identified Jefferson Orchards as a suitable location for a new MARC transit station and EPTA bus transfer center. See NorthPort Station Feasibility Study for additional information.

JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
LAND DEVELOPMENT PLAN & PLAT APPLICATION - REVISED JULY 17, 2017
CIP-1048 017 01.101 0. 01.00000000, 01. 01.00000000



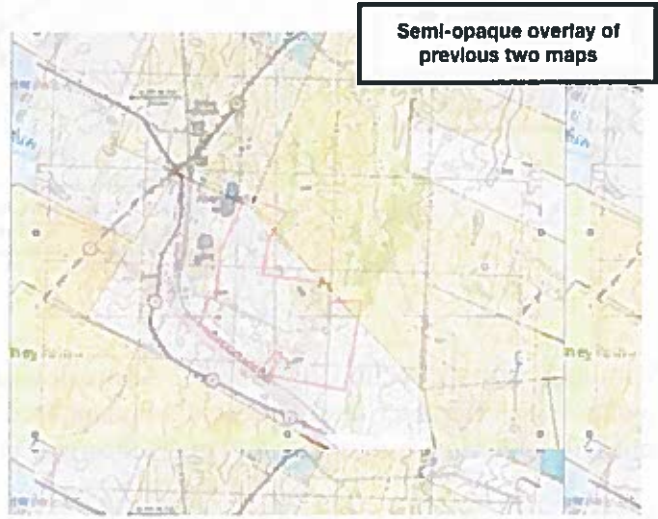
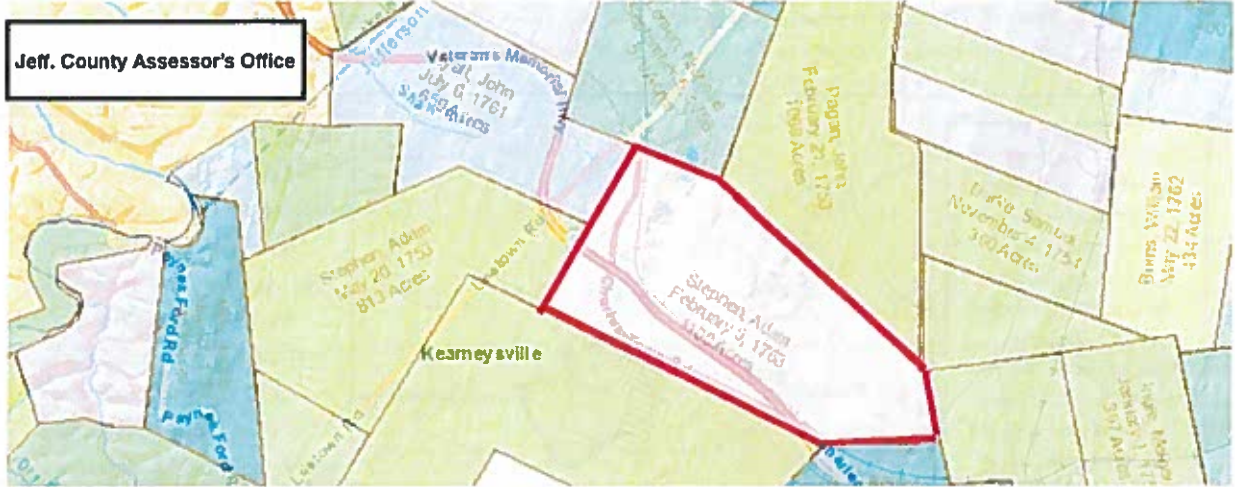
VRP 17031 Jefferson Orchards VRP Application (6-20-2017)-10.

A small cemetery is located immediately west of the Site. Materials including formaldehyde and metals may have potentially leached from the cemetery onto the Subject Property. Based on the threat of material release, the cemetery is considered to be a REC.

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Historical Significances – Rockwool site and vicinity by James Surkamp
Ranson Rezone hearing June 2020 pages 6-30

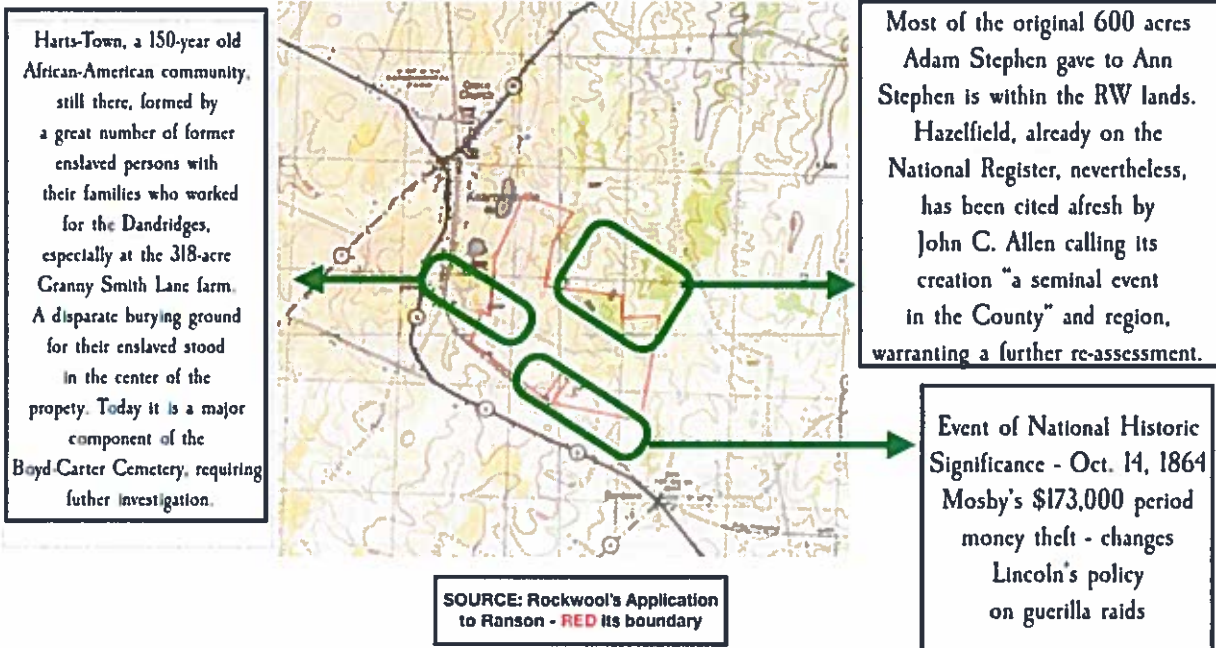
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Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

7

As illustrated in the previous overlay of Adam Stephen's initial land purchase of 1100 acres, all of the Rockwool property, the burying ground for Harts-town and much of its community, the Greenback Raid's affected area across the southern portion of the RW property and the full 600 acres that constitute the lands of Ann Stephen Hunter (and creator of Hazelfield manse) - are ALL within Stephen's parcel and was cultivated and used for pasturage since the 1760s



I am requesting a Section 106 Phase 1 Archeological Site Review of an approximately 300-acre location in Jefferson County, presently endangered by industrial invasion and performed with minimal historical investigation. This is informal with formal arriving shortly.

We are documenting the need for a thorough-going Section 106 Phase 1 Archeological Site Review encompassing an area of about 300 acres, containing unmistakable elements of major historical significance within the context of the four main criteria of what constitutes a National Register submission: a major historical figure, a major historical event, a major architectural innovation, and, above all a fourth element: a two-hundred-and-seventy year unbroken evolution of a bi-racial living situation, that once included the use of "brood women" and violence on Adam Stephen-descended, Dandridge-owned farms to a post-war co-existence with descendants of those victims, culminating today as the 140-year old African-American community of Harts-town, with an expansive "burying ground" begun for the Dandridge's "Granny Smith Lane Farm" (we shall call it), and its enslaved population since as early as 1763 and augmented after the Civil War with what is called the Boyd Carter Memorial Cemetery, which was established by residents of Harts-town, many of whom had pre-Civil War ties with the Dandrighes and their farms, such as the Fox, Ross and the Dennis families.

Adam Stephen

1. ADAM STEPHEN - HISTORICAL FIGURE OF NATIONAL SIGNIFICANCE: The 300-acres was, from 1763 thru 1772 owned and actively farmed and used for sheep and cattle pasturage by a historic figure of national significance: Adam Stephen, who for twenty years prior to the Revolution was George Washington's executive officer, was with Washington at Fort Necessity on July 3rd, 1754, was promoted to major general during the American Revolution on February 18, 1777, founded Martinsburg, WV. in 1772.

RICHMOND, *State of* VIRGINIA.

IN CONVENTION,

WEDNESDAY, *the* 25th of JUNE, 1788.

It was resolved in the affirmative—Ayes 89—Noes 79.

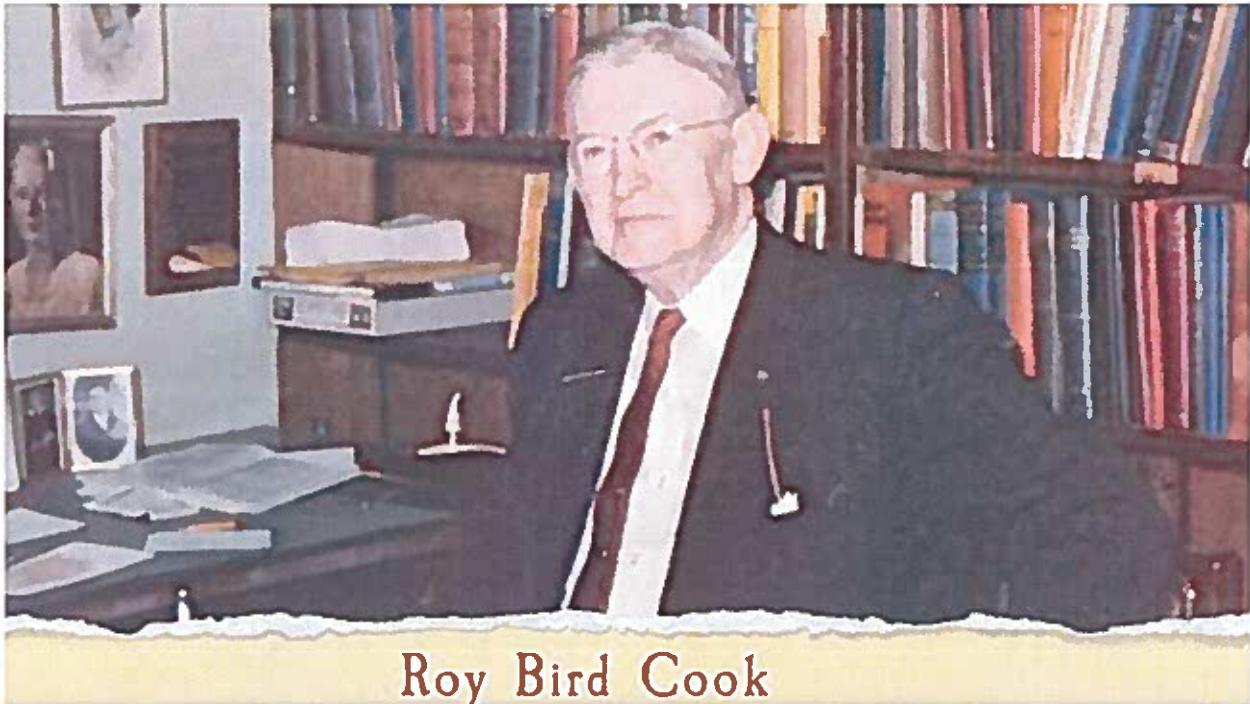
On motion of Mr. George Mason, seconded by Mr. Patrick Henry, the ayes and noes on the said main question were taken as followeth;

Of the sixteen delegates sent from what is today West Virginia, all but ONE voted YES for ratification, providing the margin needed for it to pass and guarantee a new nation.

Jones, Mr. Thomas Gaskins, Archibald Woods, Ebenezer Zane, Honorable James Madison, Mr. James Goeden (of Orange) 15
 Mr. William Ronald, Mr. Anthony Walker, Mr. Thomas Walker, Benjamin Wilson, John Wilson (of Randolph) Mrs.
 Walker Tumbin, Mr. William Peachey, Mr. William McKee, Mr. Andrew Moore, Mr. Thomas Lewis, Mr. Gabriel Jones, Mr.
 Jacob Barker, Mr. John Williams, Mr. Benjamin Hunt, Mr. Samuel Kello, Mr. John Hartwell Cocke, Mr. John Allen, Mr. Cole
 Digges, Mr. Henry Lee (of Westmoreland) Mr. Bathrod Washington, the Honorable John Blair, the Honorable George Wythe,
 Mr. James Innes, and Mr. Thomas Mathews.
 N O E S.—Mr. Edmund Coffin, Mr. John Pride, Mr. Edmund Booker, Mr. William Cabell, Mr. Samuel Jordan Cabell, Mr.
 L. J. Tappan, Mr. Charles Clay, Mr. Henry Lee (of Bourbon) the Honorable John Jones, Mr. Binns Jones, Mr. Charles Patterson,
 Mr. James Innes, and Mr. Thomas Mathews.

Above all in June, 1788, Stephen led a sixteen-delegate contingent from what is today West Virginia to Richmond, Va. - speaking eloquently and delivered the votes to pass the Constitution at the Virginia Ratifying Convention (final vote 89-79 with West Virginians under Stephen voting 15 "Aye" and one "Nay" providing the needed winning margin to secure the new nation. Writes Historian Roy Bird Cook: "In this small space, Stephen's life can scarcely be touched upon. In the story of this constitutional convention, he stands forth as the leader of the western delegates."

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Roy Bird Cook

"On the Convention" January, 1952 – West Virginia History Magazine

41:42

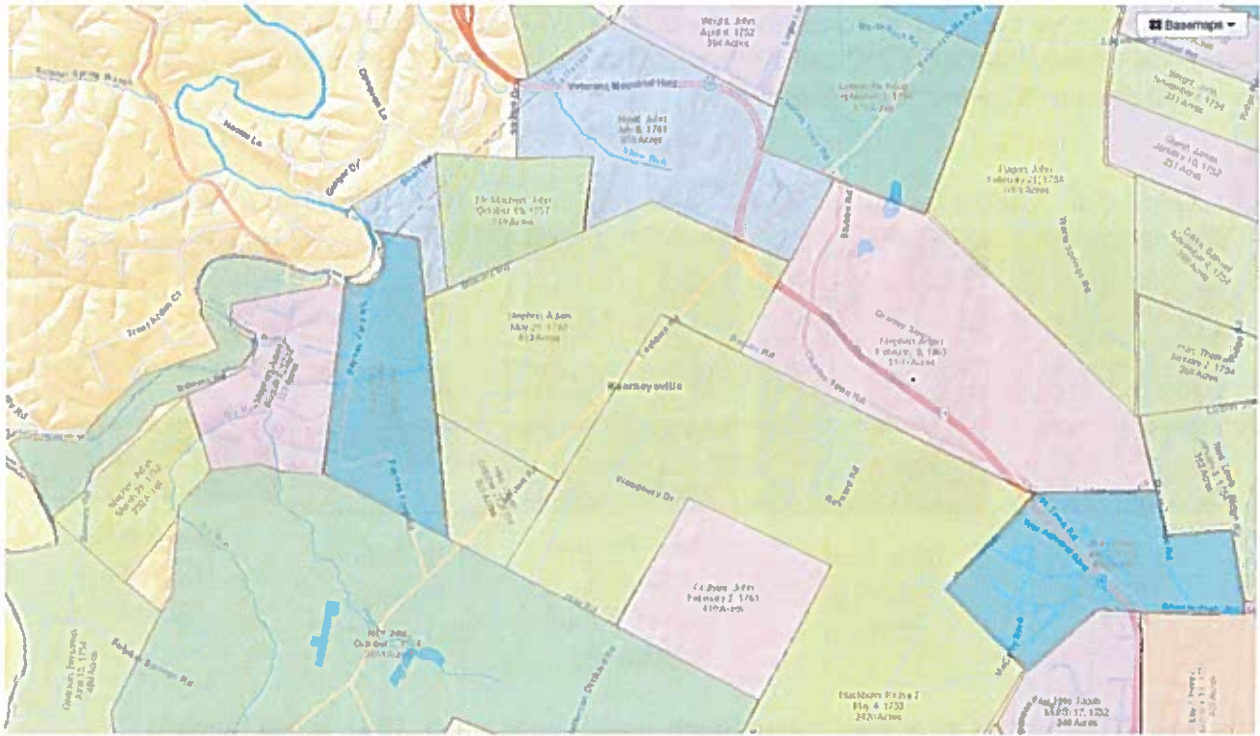
The Rocky Road to Nationhood: George Washington & Adam Stephen

<https://www.youtube.com/watch?v=RCjoGglYH1A>

Begins 29:21

Adam Stephen researcher's website (on the WVU server for about five years)

<https://web.archive.org/web/20030126124251/http://www.libraries.wvu.edu/adamstephen/>



Adam Stephen's first structure on the property first called "Adam's Bower" (later "The Bower")

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

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Within a large parcel of 1100 acres from the original 2497 acres Adam Stephen purchased in Jefferson County between 1752 and 1763, there has existed the 318-acre farm in question, that we shall call the "Granny Smith Lane" farm.

Owners of "Granny Smith Lane Farm" 318 acres due east of Kearneysville & When



Adam Stephen
1763-1791



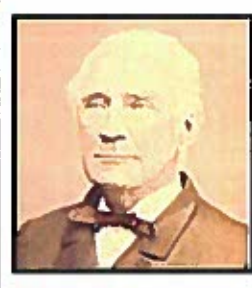
Adam Stephen
Dandridge
1794-1821



Sarah Pendleton
Dandridge
1821-1833 & late
1840s-1855



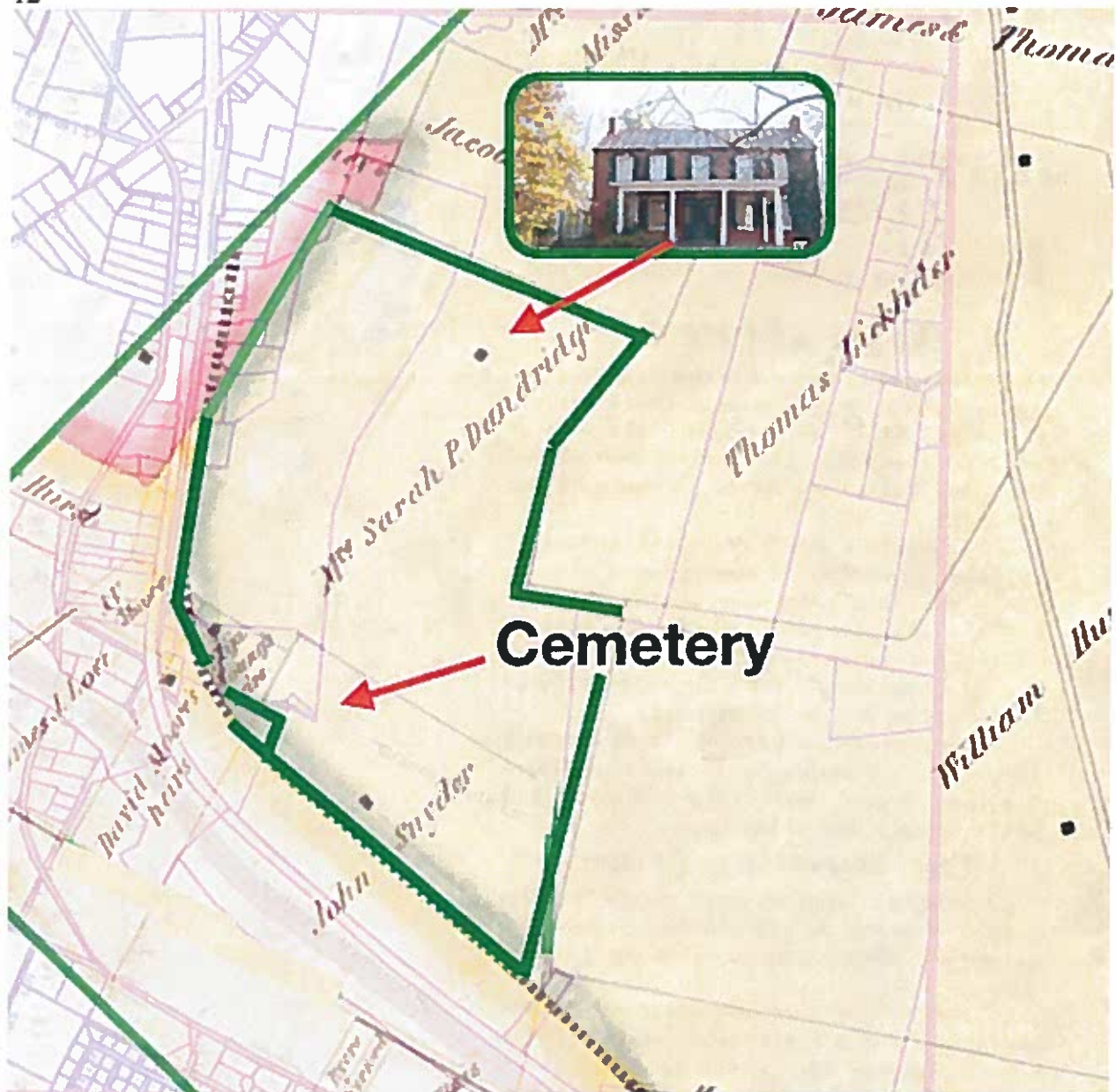
Philip Pendleton
Dandridge
1833-late 1840s



Adam Stephen
Dandridge
1855-1888

Its successive owners have been Adam Stephen until his death in 1791, when Stephen bequeathed it to his young grandson, Adam Stephen Dandridge I (1782-1821); then, Dandridge's widow, Sarah Pendleton Dandridge (1785-1855), who owned it directly from her husband's death until a division of estates in 1833 (Deed Book 33, Page 605 - Jefferson County Courthouse) and owned it again in 1852 until her death in 1855.

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Philip Dandridge fare well enough in the early days with his wife and about eleven enslaved persons helping. His home was built around 1846.

Because of poor management skills and little conscience, Philip Pendleton Dandridge mis-treated those he enslaved poorly, and sold them to pay off debts. Philip Dandridge had been advertising for months already to unload his 318-acre farm, that had 250 cleared acres, 70 acres of enclosed pasturage, sheep, ponds, a nine-room, brick house and “all his farming implements household and kitchen furniture on his farm.” A public sale occurred on December 21st of “all stock of horses all his farming implements household and kitchen furniture on his farm.” – (“The Martinsburg Gazette,” Vol. 48 March 4, 1847, P. 3; March 11, 1847, P. 3; December 9, 1847, P. 3).

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pleasure in showing it to them.

GEORGE COUCHMAN,
CORNELIUS COUCHMAN,

March 4, 1847—if Agents for the owner

JEFFERSON FARM FOR SALE.

THE subscriber offers at private sale, the
FARM upon which he resides, contain-
ing

318 Acres,

of limestone land; about 250 cleared, in a good
state of cultivation, and with abundant resour-
ces for its further improvement, available at
very little expense. The greater part of the
Wood land (about 70 Acres) is enclosed for
pasturage.

The Oposquat Creek (upon its Western bor-
der) and a number of conveniently situated
Ponds, give it a permanent supply of water.
And the Shepherdstown Turnpike passing
within a few hundred yards, renders the access
easy, at all seasons, to the Village, Mills, Rail
Road Depots, etc., in the vicinity.

The improvements here, all, been recently
erected, and are ample for the accommodation
of a large family, both white and black, and
for the various uses of the farm.

The Dwelling-House,

(both of brick) contains nine rooms, besides
Pantry, Cellars, &c., is handsomely finished,
and prettily situated, in an extensive grove of
oaks.

In every respect, this property combines the
requirements of a comfortable residence, with
a well improved and productive Farm, justly
considered one of the most valuable, of its size
in Jefferson County. It is offered for sale up-
on the most liberal terms, both as to price and
the time of payment.

For further particulars, either apply to the
subscriber, (personally) on the premises, or by
letter, addressed to him, near Lees town, Jeffe-
son County, Virginia.

PHILIP P. DANDRIDGE.

March 4, 1847—if

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Walter Dean Myers, who was born in Martinsburg, descended from the Dennis family who worked at The Bower and has become a respected author, wrote this in his book, "Now Is Your Time":

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.309.1412&rep=rep1&type=pdf>



"In 1849, Adam Stephen Dandridge II (1814-1894), lived at The Bower and ran the plantation. His brother Philip lived nearby. When Philip needed to secure his loans, he put up part of his inheritance, which consisted of part of the Bower lands and his Africans:

'The following slaves, the property of the said Philip P. Dandridge, now in his possession in Jefferson County, or in the custody of Dr. Gellot Hollingsworth and Samuel Hollingsworth, in the State of Louisiana, together with the increase (children) of said slaves – vis; Cato, Henny, George, Robert, John, Daniel, James, Simon, Peter, Tina, Caroline, Leah, Mary Ann and her children, Rachael, Ann, Louisa & children, Frances, Margaret, Patty, including all of the slaves of the said Philip P. Dandridge, whether named or not. . . to secure a debt of said P. P. Dandridge' – (Myers, P. 103).

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Portrait of Sarah Pendleton Dandridge
(Mrs. Adam Stephen Dandridge, Sr. 1755-1855)
painted in 1833

The Boyd-Carter cemetery and environs may have been initially a cemetery for persons enslaved by A.S. and S.P. Dandridge, the holders of the largest number of enslaved persons in the county in 1850 (64).

The cemetery is on S.P. Dandridge (Mrs. A.S. Dandridge) land (below 1852 map). That ancestors had already been buried there would explain why later generations continued to tend to and have burials in this hard-to-reach, out-of-the-way cemetery

White Dean Myers, who was born in Maryland descended from the Deane family who worked at The Beech and has become a respected author, wrote this in his book, "New Is Your Time"

"In 1849, Adam Stephen Dandridge II lived at The Beech and ran the plantation. His brother Philip lived nearby. When Philip needed to secure his loans, he put up part of his inheritance, which consisted of part of the Beech lands and his African

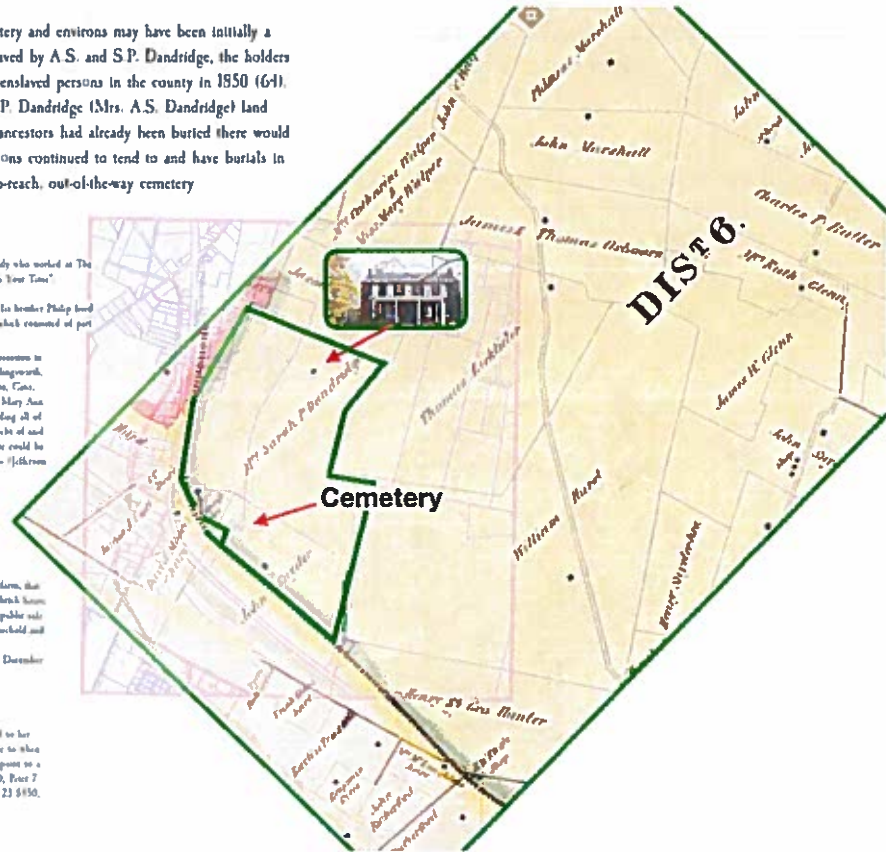
The following slaves, the property of the said Philip P. Dandridge, were in his possession in Jefferson County, or in the custody of Dr. C. C. Hall (Hall) and Samuel H. Hall (Hall), in the State of Louisiana, together with the increase (children) of said slaves - viz, Cass, Henry, George, Robert, John, Daniel, James, Simon, Peter, Taz, Caroline, Leah, Mary Ann and her children, Rachel, Ann, Leona & children, Fanny, Margaret, Fanny, including all of the slaves of the said Philip P. Dandridge, whether named or not - to secure a debt of said P. P. Dandridge - Myers, P. 99; NOTE: "Rachel" mentioned in the above note could be "Rachel" owned Adam S. Dandridge, who died July 2, 1853 of cancer, aged 36. - Jefferson County R. quarter of District, 1853, P. 1, Line 44)

Philip Dandridge had been advertising for months already to sublet his 25 acre farm, that had 250 cleared acres, 70 acres of unworked pasture, sheep, ponds, a saw-stone, brick house and "all his farming implements household and kitchen furniture on his farm." A public sale occurred on December 21st of "all such of his farming implements household and kitchen furniture on his farm." -

("The Maryland Gazette," Vol. 45 March 4, 1847, P. 3, March 11, 1847, P. 3, December 8, 1847, P. 3)

http://www.there.org/~ter/ta_d_dand.jpg?d=197231

The 70 year old Sarah Dandridge died March 13, 1855, leaving all her enslaved to her struggling son Philip. She had the will drawn up three years earlier aware to name to whom Philip sold the Commission he officially had no occupation. His financial status points to a sale. They were appraised: Armstead 26 \$1125; Alfred 24 \$1150; Henry 10 \$800; Peter 7 \$700; "Woman" 30, child \$1000; Jesse 4 \$275; Judy 7 \$375; Ann (not sound) 23 \$450; York (encumbrance) 60 \$100. York (encumbrance) 60 \$100 - ("County Will Book 2, P. 520)



In fact, Phillip Dandridge's mother, Sarah, wrote and published her will about three years before her death. She had re-gained control of Granny Smith Lane farm because her son failed to meet obligations. Accordingly, her will stipulates that the Granny Smith Lane Farm could not be sold by Philip because she put it in trust to another, more reliable family member. She nevertheless left one-fifth of "all my servants" to Phillip - the same "one-fifth" just as she did to all her mentioned descendants. Tragically, it appears that Philip Dandridge promptly sold these people, as shown in this appraisal report:

They were appraised: Armstead 26 \$1125; Alfred 24 \$1150; Henry 10 \$800; Peter 7 \$700; "Woman" 30, child \$1000; Jesse 4 \$275; Judy 7 \$375; Ann (not sound) 23 \$450; York (encumbrance) 60 \$100.

The last family member to own and operate Granny Smith Lane Farm was Sarah Pendleton Dandridge's most industrious son, Adam Stephen Dandridge II (1814-1894) took control of the farm and ran it for thirty more years until 1888. According to the 1860 Slave Schedules, he controlled several Dandridge farms and eighty enslaved persons.

Adam Stephen Dandridge II demonstrated his mercantile ruthlessness promptly:

He signed an agreement Dec. 11, 1856 with George Terrill, stating that, beginning March 7, 1857 thru until March 7, 1860, George Terrill, for payment in quarterly installments totaling

16

\$2,000 yearly, could “move freely” about the “the slave-holding states or territories” with about thirty-three of Dandridge’s enslaved, putting them to what uses he chose. He would pay undetermined expenses involved. At the time of the agreement, they were in Florida and Alabama and had apparently been working for a Mrs. Scoropa Purnell. NOTE: The punctuation of the agreement makes the exact number of persons unclear. It reads:

“I have this day Dec 11, 1856 hired of Scoropa Purnell the Negro slaves herein after mentioned for the term of three years commencing on the seventh day of March next and ending on the seventh of March 1860 for which use to pay here two thousand dollars per year in quarterly installments of five hundred dollars. The Negroes are named as follows, Alte, Bechington, Dick Freeman, Frank Ross, George Blount, George, Kitty, John Ross, Joshua, Louis Freeman, LeRoy, Mathew, Tinman Ross?, Steven, Sam Blount, Walte?, William Henry, William Ross, Charlotte Emeline, Ellen, Julia, Kitty, Louisa, daughter of Fanny, Martha, Ann, daughter of Fanny, Ann Blount and two children: Fanny Juliett, Louisa and three children. These Negroes are now in my possession in Alabama and Florida and is agreed. by Miss Purnell that I am to have the right and privilege of moving them into any of the slave holding states or territories of the United States and I promise and agree to pay all the expenses of these Negroes during the term for which I have held them signed George Terrill.” NOTE: “Louisa” is reported to have had an “unnamed” infant born at The Bower Nov. 9, 1853. – (Dandridge Papers #267, Jefferson County Museum, Charles Town, WV; County Register of Births)

Please note that this list includes “Rosses” - a John Ross, Tinman Ross (?) and Frank Ross.

<http://documents.jeffersoncountywv.org/Image.aspx?control=12851>

Standard Line & Stone Co.
To: Deed of Bargain and Sale.

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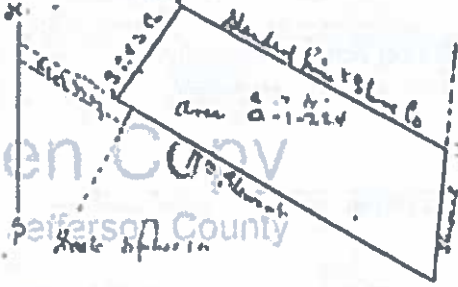
Trustees' Burying Ground

2019 Jefferson County

2

This Deed made this 31st day of December 1902 between the Standard Line and Stone Company, a corporation of W. Va., having an office at Baltimore, Maryland of the first part and Allen Cole, William Cole, Tucker Ford, Albert Mason, Douglass Roper, Benjamin Carter, and Woley Fry Col, Trustees, all of Jefferson County West Virginia.

Witnesseth:- that for and in consideration of the sum of One Dollar (\$1.00) cash in hand paid by the parties of the second part, the receipt whereof is hereby acknowledged, the parties of the first part do grant and convey with covenants of general warranty unto the said Trustees all of their right, title, interest to, and in the following described tract of land situated about 1 mile South East of Kearneysville, Jefferson County, West Virginia.



Beginning at a stake (fig 1); thence S 60-15E at 12 ft. passing through a stone corner to William Stewart in all 14.9 poles to a stone Stewarts corner (fig 2); thence N 6-08 E. 5.1 pole to a stake now made a corner (fig 3); thence N 60-15 W 12.45 poles to a stake corner to (fig ; thence S 34-40W

4.58 poles to the beginning containing one rood twenty two and four tenths perches (22.47).

The said lot of ground conveyed to the aforesaid Trustees to be used as a burying ground for colored people and for no other purpose.

To have and to hold the said lot herein conveyed with all rights privileges and appurtenances therunto belonging including a right to use a road, for ingress or egress to said burying ground, and used by William Stewarts through the lands of the Standard Line & Stone Company unto the said Trustees or their successors forever.

Witness the following signatures and seals.

The Standard Line & Stone Co., (Seal)

by Daniel Baker (Seal)

President.

State of Maryland
Baltimore City SS.

Stolen Copy

St

19 Jefferson County

2019 Jefferson County

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I, hereby certify that on this 10th day of January A. D. 1903, before me the subscriber a Notary Public of the State of Maryland personally appeared Daniel Baker President of the Standard Line & Stone Co. and did acknowledge the foregoing deed to be his act.

Witness my hand and Notarial Seal.

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

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In "the burying ground" as it was originally described in a deed (Deed Book 98, Page 68), Jefferson County Courthouse) - a "burying ground" not affiliated in the deed with any church or institution - and in the Boyd Carter Memorial cemetery addition, there are Ross family members with markers. Daniel Baker, the president of the adjacent Standard Lime & Stone Company states that the creation of the burying ground and "the foregoing deed was his act." Meaning it was created to large degree out of concerns for his business.



The Rosses, Dennis and Fox families all originated as enslaved families at the Granny Smith Farm and/or other Dandridge controlled farms in the neighborhood. They became the nucleus of what is today called Harts-town, the founders of its churches. John H. Fox (1845-1911), the son

20

of the mother who was once removed from the Bower for refusing to be a brood woman, prospered. He once owned the area known as "Fox Glen" subdivision. When he died, he also had property (Will Book C, Page 49 – Jefferson County Courthouse) including his 169- acre "Home Farm" that was subdivided into parcels for his descendants.

<http://documents.jeffersoncountywv.org/Image.aspx?control=18128>

<http://documents.jeffersoncountywv.org/Image.aspx?control=18057>

https://www.youtube.com/watch?v=2WmryvueSXM&fbclid=IwAR3ls1AARSWYufnT1tE7pfxCt_KmQgrwOA29KoqCxr5Q9ll0mWRrh2Oc

The Granny Smith Lane Farm remained under the control of the aging Adam Stephen Dandridge II and it went out of the family in 1888 for the first time ever, going to William T. Stewart. The Farm nevertheless offered employment opportunities and needed the skills of the families who worked there and with the Dandridges before 1860.

<https://archive.org/details/populationschedu1689unit/page/n299>

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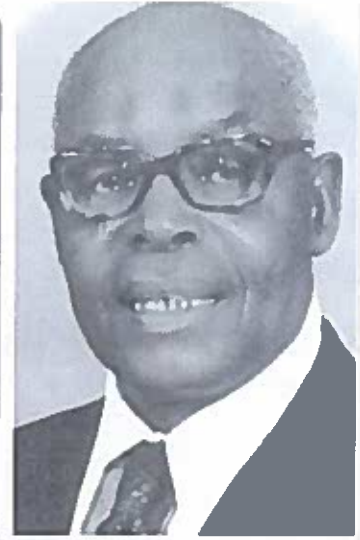
On page 438 of the Jefferson County, West Virginia Census of 1870, two large families whose parents were born at the Bower - the Lucas Dennis household and the Charity Fox household - are shown where Harts-town grew up. The nearby St. Paul's Baptist Church's cemetery has fifteen markers for "Fox," probably related to the Foxes raised at the Bower.

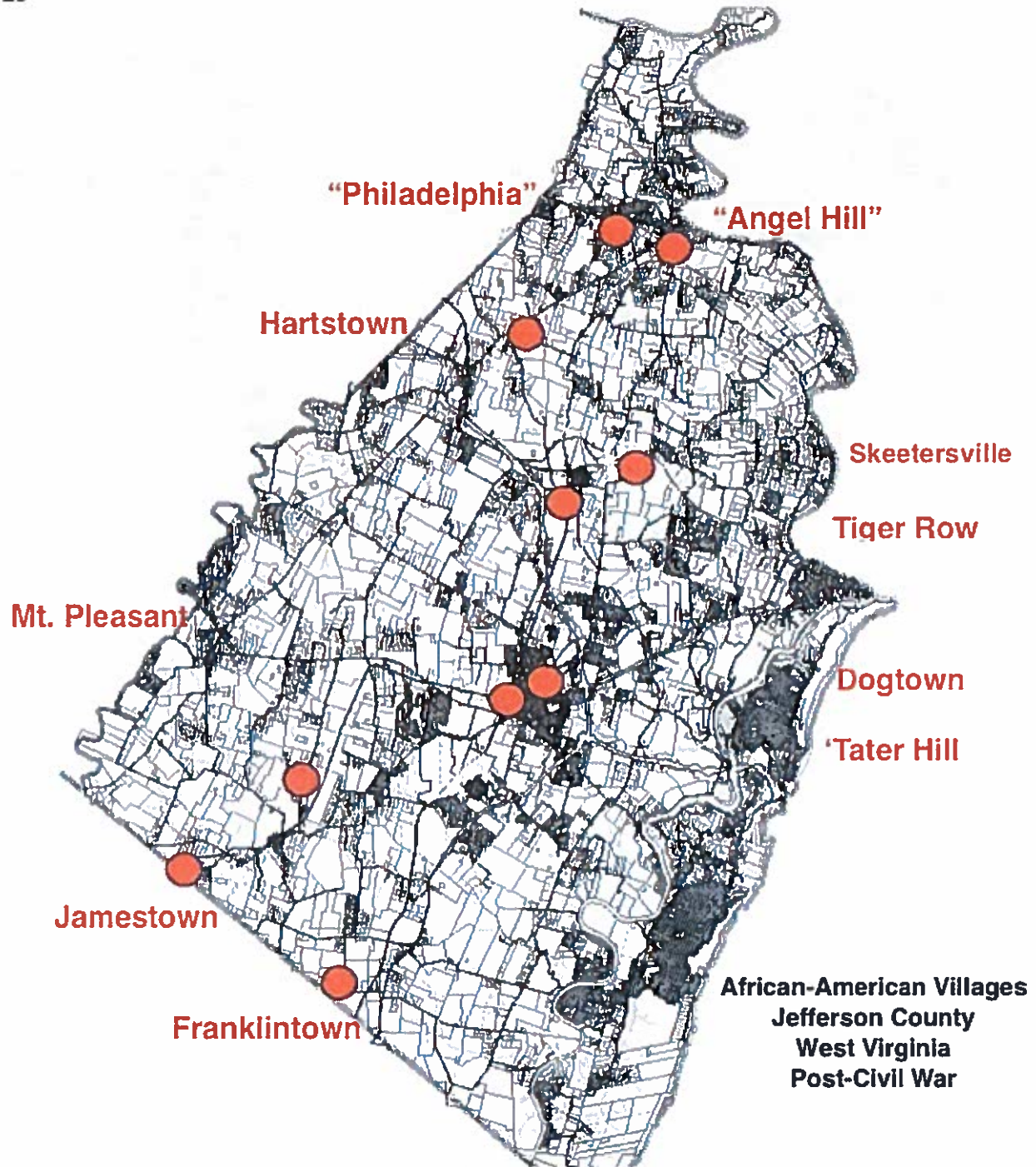
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**The King James Bible
& the Constitution
are the two documents
worth fighting for -
Beverly Douglas Taylor
1906-1994**





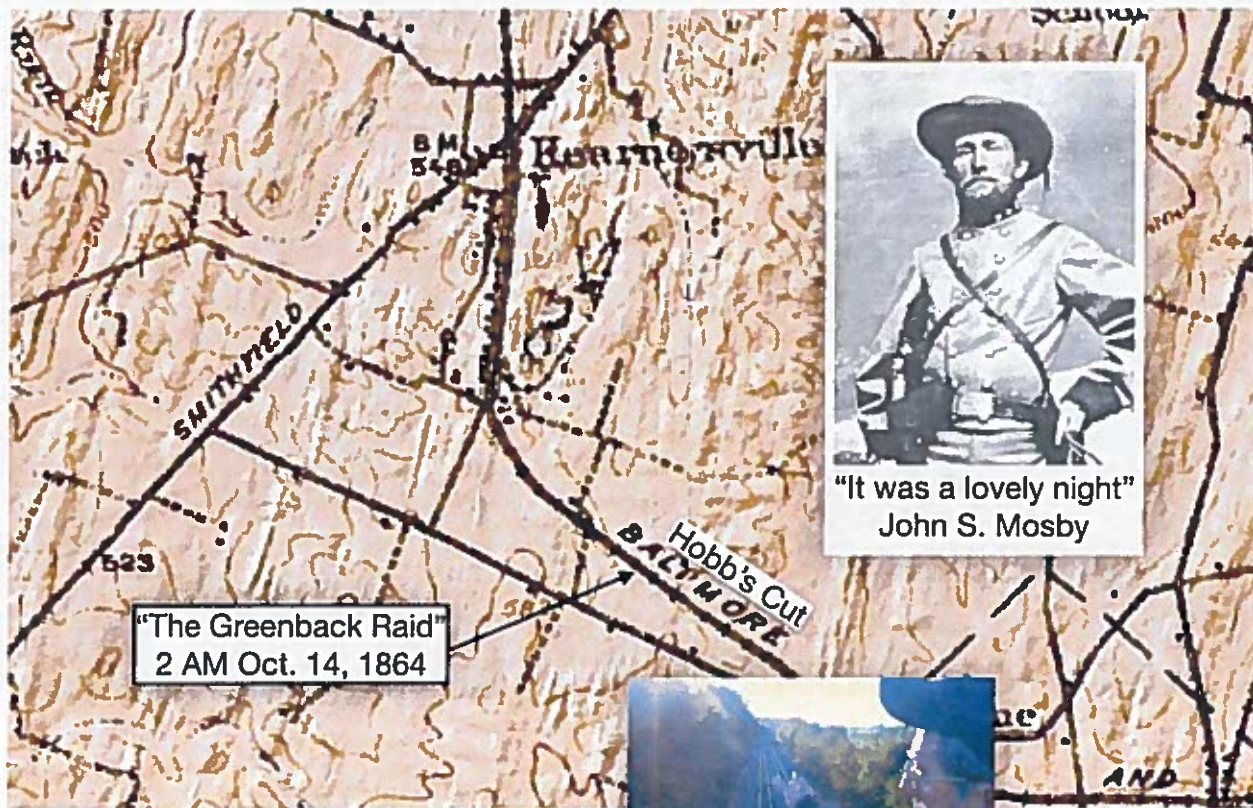
It follows the pattern described by Beverly Douglas Taylor (1906-1994) in a recorded interview with Mr. Surkamp in 1990, that African-American families for the thirty years after the war, planted new communities in the county - often along a railroad rights-of-way like Hartstown, and the communities took root as they each established a church or two and a school to make the community a true community.

Today Harts-town with some of these original families' descendants still lives and needs respect. Even those who left for years have returned to visit their ancestors in these cemeteries and have responded in protest. NO ONE was consulted.

The afore-given narrative shows that the many possible gravesites unmarked are actually typical of pre-Civil War slave cemeteries, according to Shepherd University career archeologist. Moreover, the absence of any marker is because, before the Civil War, burials of the enslaved were perfunctory affairs and cheap - marked with wooden markers that have been lost with time.

The remarkable number of possible gravesites, detected by ground-penetrating radar amply supports the documented past for this site which was, up to 1883 completely within and surrounded by the Granny Smith Lane Farm. The site warrants a professional assessment given how the past circumstances point strongly to an earlier version of this cemetery as also a burying ground for the enslaved.

3. THE GREENBACK RAID OCT. 14, 1864 ON THE ROCKWOOL PROPERTY:



Civil War historian Steve French

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

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<http://civilwarscholars.com/2018/11/mosbys-greenback-raid-jefferson-county-wv-oct-14-1864-with-steve-french/>



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John Yates Beall
from Charles town, Va,
1835-1865

The National Register seeks locations with events of national historic significance that need to be preserved. Across the southern portion of the Rockwool site beginning just east of what is called Northport Avenue and in 1864 was called Quincey's siding - a dramatic attack on a federal passenger train by eighty partisans under John Singleton Mosby resulted in the outright theft of \$173,000 period dollars - much in a payroll for Union soldiers. Since they were partisans and not regular Confederate soldiers, they could do what they wished with the money - being about \$2,000 per man; and they enjoyed it. Historically this event prompted Lincoln to establish a very tough policy against behind-the-lines guerilla activity to prevent a time when the country would suffer many years of random, "freelance" violence after the end of a formal war. For example, he refused in February, 1865 to commute the hanging of John Yates Beall, from Jefferson County, for similar acts, against overwhelming pleas to spare him.

4. Another major criterion for qualifying for the National Register is architecture of historical significance. John C. Allen, author of the profoundly detailed and much praised book "Uncommon Vernacular," a book analyzing structures in Jefferson County before the advent of the influences of the railroads writes (P. 81):





30

"The building of Hazelfield was a seminal event in the area, bringing an entirely new residential plan and appearance-one that would steadily gain popularity among the county's elite. Hazelfield became the archetype for two new house forms that would define the local landscape - the transverse hall house and the three-bay center hall house." He continues (P. 82). "There are no known examples of transverse-hall houses in neighboring Frederick County, Virginia; Berkeley County, West Virginia; or Washington County, Maryland. One must stray farther south to find groups of these uncommon houses. Eastern and Piedmont North have several transverse-hall houses."

It should be noted that the 600-acre Hazelfield property was given to Anne Stephen upon her marriage. The overwhelming portion of the acreage is within what is today called the Rockwool property.

https://wvupressonline.com/allen_uncommon_vernacular_9781933202877

Hazelfield has been recognized as a National Register structure but this new, fresh, in-depth research by Mr. Allen's team has identified something new, very important and unappreciated at the time of its initial nomination and bears reinvestigation and confirmation.

The original 600-acre parcel of Hazelfield also enters the Rockwool proposed site area.

To all this the Weller Survey, I argue with a calculated ineffectiveness, concluded that there was no significant history associated with the Rockwool site. My impressions from reading the email exchanges with SHPO, SHPO was placed under a claimed time constraint facing a construction start date which now a year later, still has not really happened.

Jim Surkamp, P.O Box 1035, Shepherdstown, WV 25443 - jsurkamp@gmail.com

1

**SINKHOLE COLLAPSE ABOVE SUB-SURFACE HEADWATERS THREATENS THE
CONSTRUCTION OF ROCKWOOL PLANT AND THE DRINKING WATER OF EIGHTY PER
CENT OF THE COUNTY'S RESIDENTS**

Prepared by Jim Surkamp Ranson Hearing June, 2020 (3 pgs, 4 images)

The drinking water of eighty per cent of the county's residents is likely to be polluted by massive releases of contaminated water in the near-certain event the ground collapses beneath Rockwool's mammoth holding ponds. The time-consuming, work-stopping difficulty in checking the holding ponds lining for leaks argues that Rockwool might not actively seek out and prevent inadvertent wastewater dumping in the groundwater due to ground collapse. In fact, they were fined by the WV Department of Environmental Protection in October, 2018 for failing to report ten sinkholes, one large enough to swallow up a school bus.

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Sinkholes are inevitable at the site because of nine conditioning factors that are present there: proximity to "faults, fold axes, fracture traces oriented along bedrock strike, fracture traces oriented ACROSS bedrock strike, ponds, streams, springs, quarries, and interpolated depth to groundwater." - Daniel H. Doctor, Katarina Z. Doctor. "Carbonates Evaporites" (2012) 27: p. 143.

Sinkholes do not occur once but repeatedly where they exist along the meeting point of two different plains of rock formations, causing fault lines and fractures. Rockwool pond complex is located on a "hotspot" of such a major fissure. - G. Perry; "County-Wide Groundwater Assessment of Jefferson County" by Analytic Services," 2012 p. 35; Doctor, pp. 143-152.

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2

"A USGS study published in 1991 used dye tracer tests to determine rates and directions of ground water flow within the karst aquifer. Dye was injected into a sinkhole in Shenandoah Junction, about a mile from Jefferson Orchards. Two weeks later the same dye was detected at a monitoring point north of Shepherdstown. Within 20 weeks, it was detected at an additional 5 sites between Kearneysville and Shepherdstown. The study reported movement of up to 840 feet per day. Again, this indicates that contamination can happen QUICKLY." - Beverly Ross, p. 12

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Sources:

"County-Wide Groundwater of Jefferson County" by Analytic Services," April, 2012 p. 35
<http://www.jeffersoncountywv.org/home/showdocument?id=3783>

ROCKWOOL'S STORMWATER POND DESIGN, CONSTRUCTION DEFICIENCIES AND GROUNDWATER CONTAMINATION

G.A. Perry, Architect, LEED AP -gavarch@gmail.com –January7, 2020

<https://www.jeffersoncountyfoundation.org/wp-content/uploads/2020/01/Rockwools-Stormwater-Design-and-Construction-Deficiencies-and-Groundwater-Contamination-January-7-2020.pdf>

Environmental impact to Jefferson County from Rockwool Facility - September 24, 2018 -

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Water Resources Investigation Report 90-4118, 93p. Appendix A, pp. 54-65

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FOUR ILLUSTRATIONS FOLLOW



Sinkhole in Rockwool's Basin #1 – October, 2018

Key

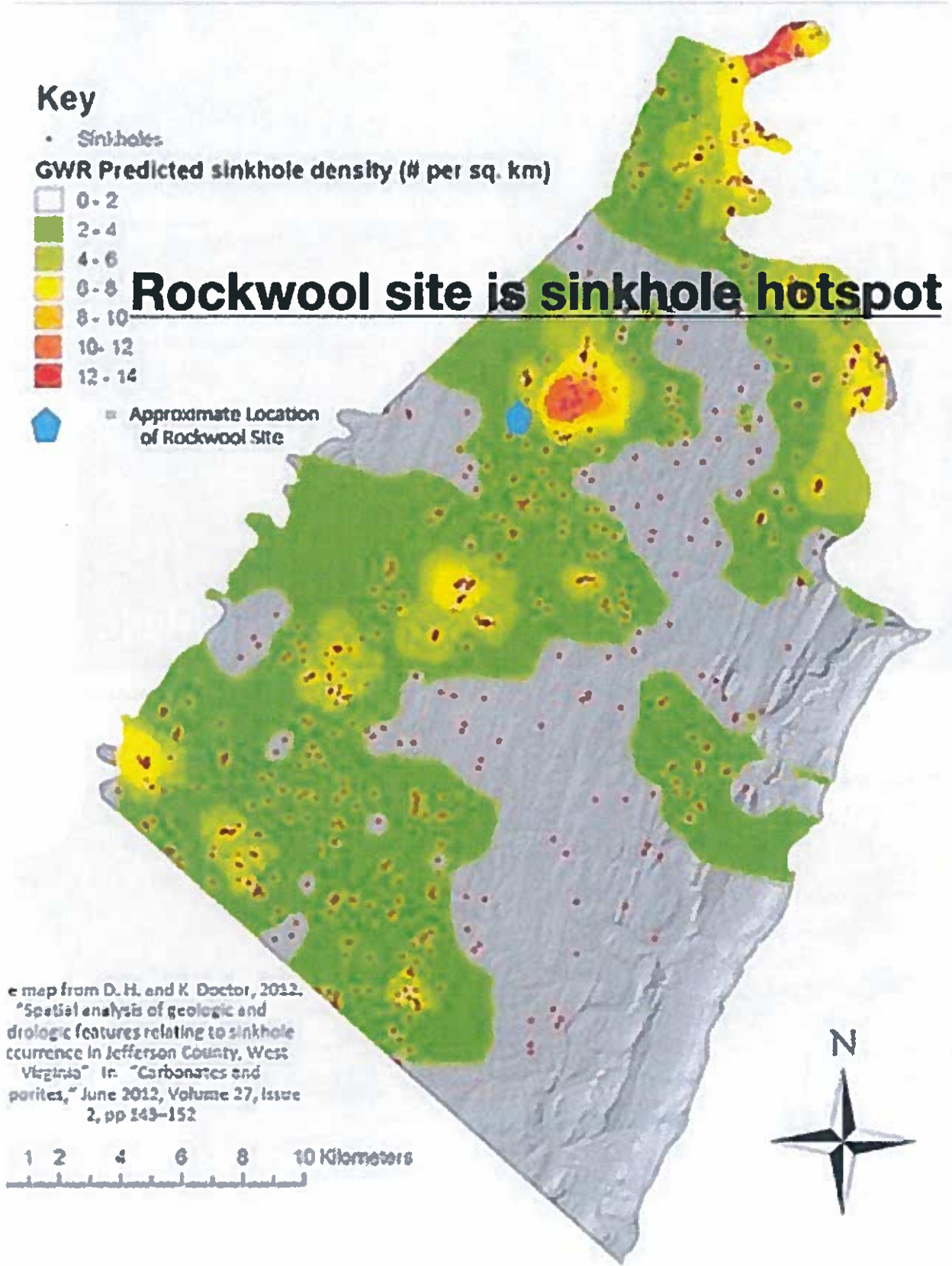
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GWR Predicted sinkhole density (# per sq. km)

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■ Approximate Location of Rockwool Site

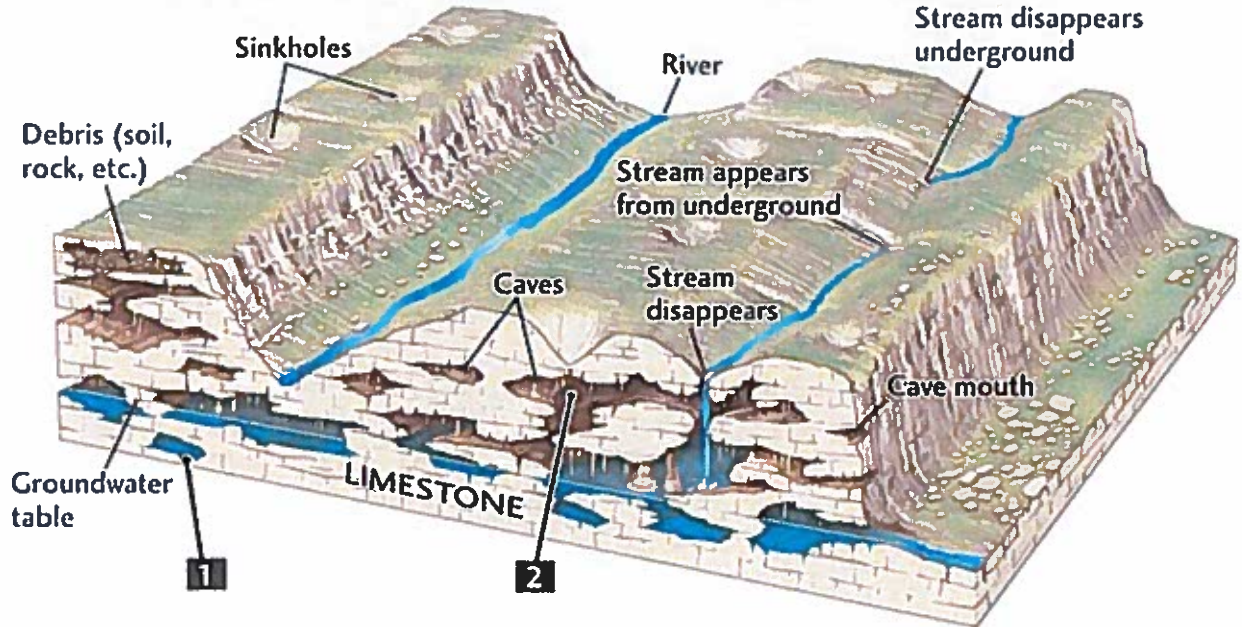
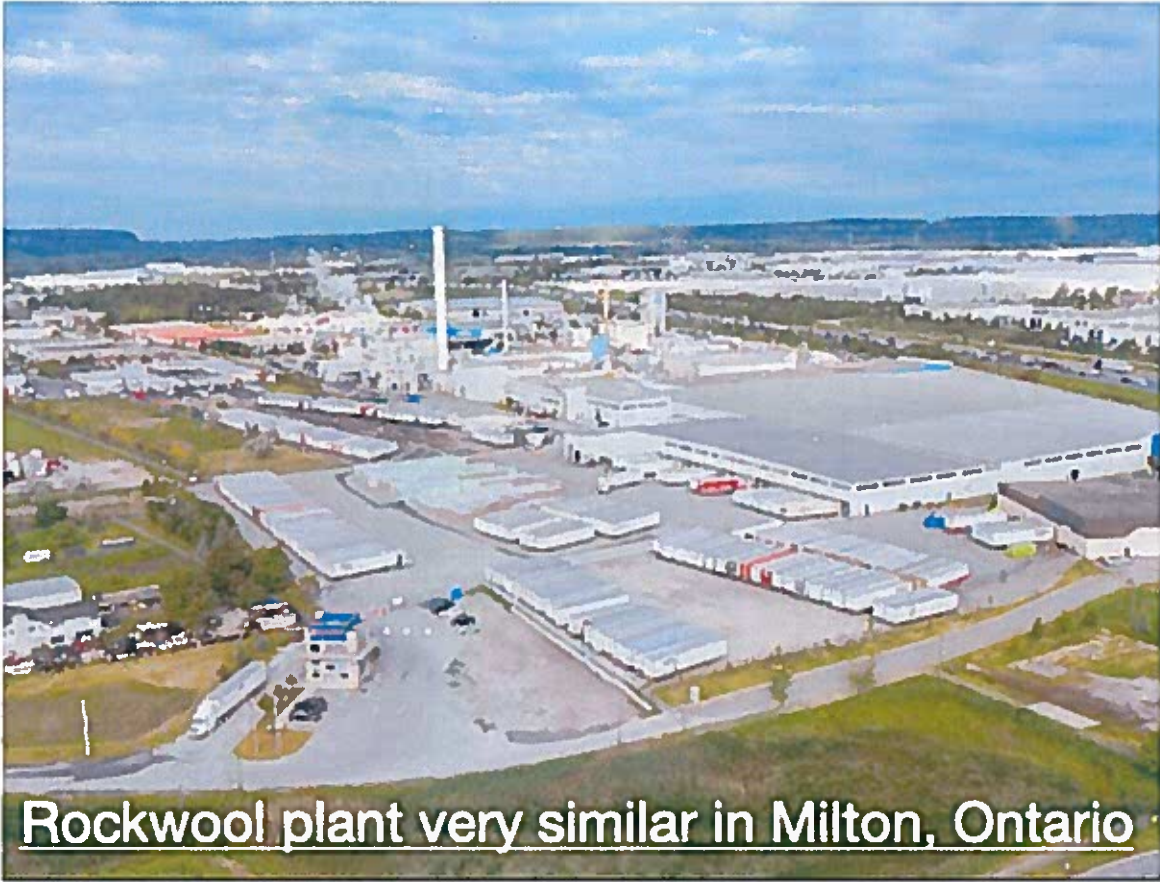
Rockwool site is sinkhole hotspot



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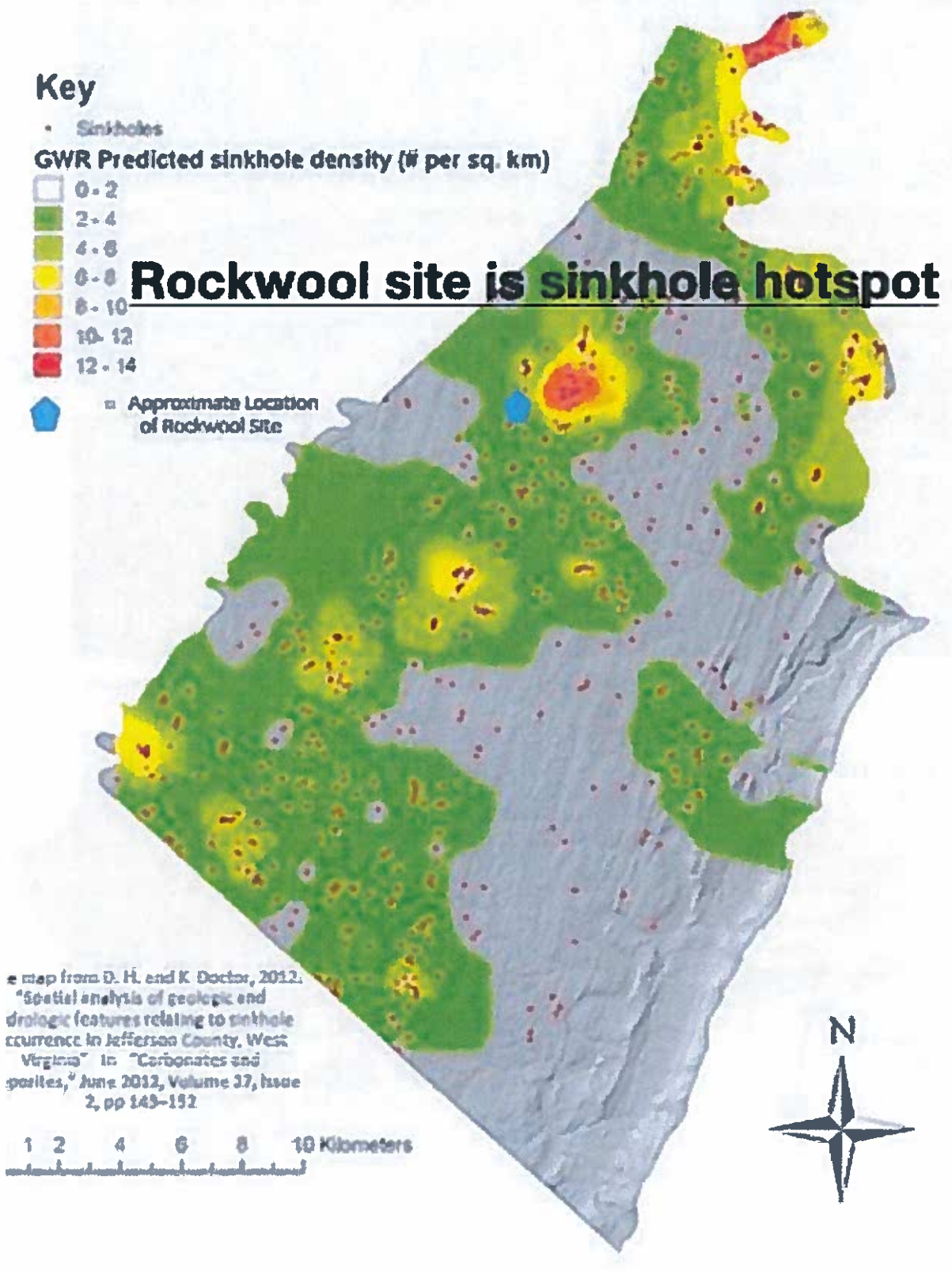
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- 12-14

■ Approximate Location of Rockwool Site

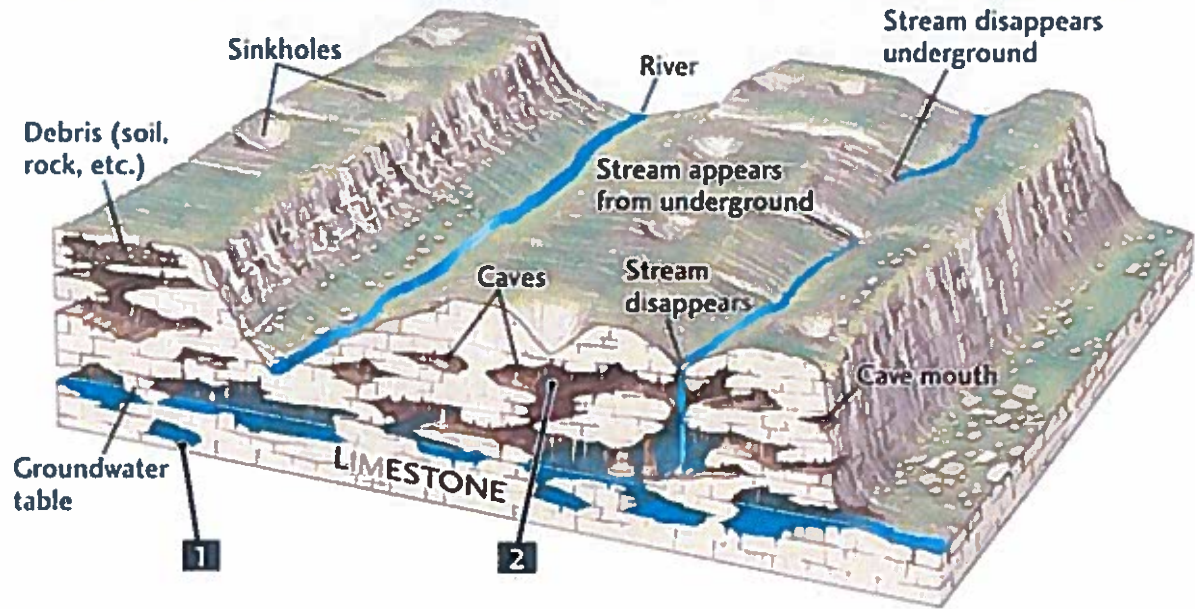
Rockwool site is sinkhole hotspot



Map from D. H. and K. Doctor, 2012, "Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia" in "Carbonates and sinkholes," June 2012, Volume 37, Issue 2, pp 143-152



Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)



Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Against Rockwool <lar.volunteer.coordinator@gmail.com>
Sent: Sunday, June 14, 2020 8:55 PM
To: Stacey Pfaltzgraff
Cc: Al Van Huyck
Subject: Rockwool Public Hearing
Attachments: Rockwool Love 0124.pdf

CAUTION: External Email

To Whom It May Concern:

My name is Michelle Sutphin and I am a resident of Loudoun County, VA. I have been a part of a group called Loudoun Against Rockwool (LAR) since August of 2018. Our group has grown very concerned about the potential negative impacts on Loudoun County with the building of the Rockwool factory. Between 2018 and 2019, the LAR group spoke at every single town council in Loudoun county and successfully persuaded every town to issue a written statement formally opposing the plant. The attached briefing was given to Lovettsville on January 24, 2019 which was our last town to adopt a statement and was reported in the following linked article: <https://loudounnow.com/2019/02/01/lovettsville-becomes-final-loudoun-town-to-oppose-rockwool/>

I am formally submitting this briefing to you as supplemental evidence regarding the adverse impact upon your neighbors in Loudoun county and we highly encourage your opposition to this matter.

Thank you,
 Michelle J. Sutphin
 Phone: 240-595-1212

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Jane M. Tabb
922 Old Leetown Pike
Kearneysville, WV 25430
304-725-4325 vinemont.farm@gmail.com

Honorable Mayor and Ranson Council Members:

June 18, 2020

In my review of Ranson's Comprehensive Plan, I have found many instances of conflict with the proposed rezoning of the Jefferson Orchards property. By law, you must find that the rezoning is compatible with the Comprehensive Plan. Clearly, it is not. Consider the following statements taken directly from your Comprehensive Plan:

p. 20

As this Comprehensive Plan is periodically updated, it is expected that each area will be re-evaluated to determine if a new category applies. For example, if an area identified for infill/regeneration is transformed into a complete neighborhood, its category would change to 'maintenance.'

TABLE 2.1 INTENDED CHANGE			
Color	Sector	Name	Intention
	O1	Preserved Open	Maintain
	G1	Restricted Growth	Maintain
	G2	Controlled Growth	Controlled Expansion
	G3	Preferred Growth	Preferred Expansion
	G4	Redevelopment / Infill	Regenerate or Maintain
	S1	Suburban Residential	Maintain
	S2	Suburban Commercial	Maintain
	S3	Industrial	Maintain

The first line in the chart: **O1 Preserved Open Maintain** clearly illustrates that "maintenance" is the goal of the Comprehensive plan for this land use. The last line of the chart: **S3 Industrial Maintain** demonstrates that rezoning Jefferson Orchards is not a goal of the Comprehensive Plan.

Continue to following page.

Jane M. Tabb
922 Old Leetown Pike
Kearneysville, WV 25430
304-725-4325 vinemont.farm@gmail.com

p. 21

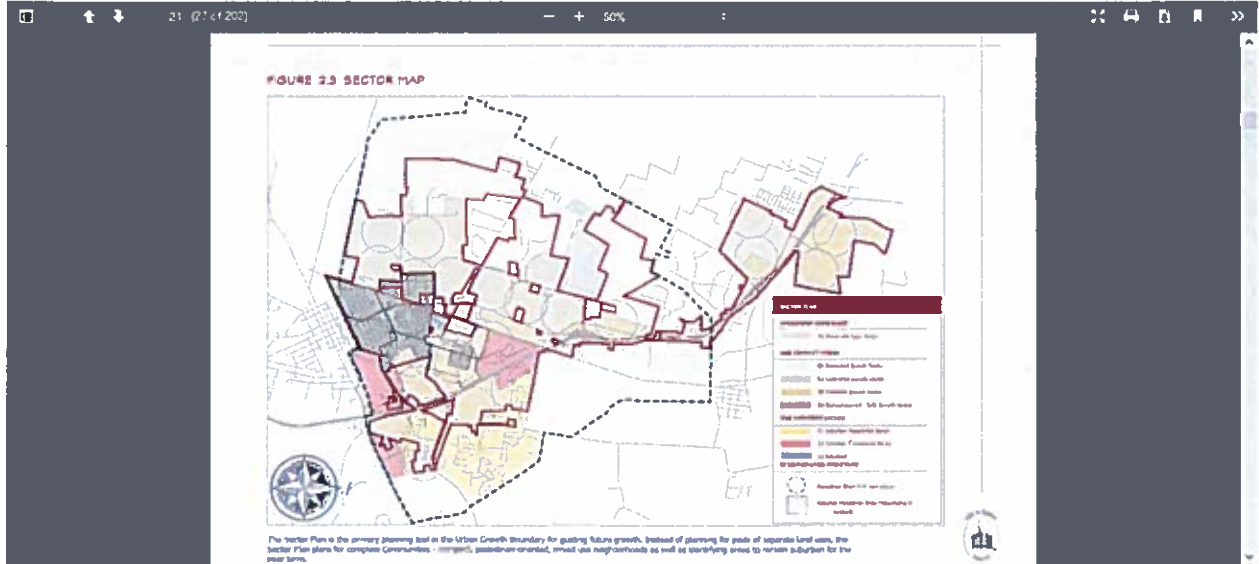


Figure 2.3 Sector Map is your guide for future growth and maps Jefferson Orchard as G3- Preferred Growth Sector with 2 "Pedestrian Sheds" delineated. The current zoning of this property results in no opportunity for anything close to "Pedestrian Sheds" as outlined in the Comprehensive Plan.

Continue to following page.

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Jane M. Tabb
922 Old Leetown Pike
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304-725-4325 vinemont.farm@gmail.com

p. 30

During the September 2011 workshop five major redevelopment and development projects were proposed within and adjacent to Ranson, and one on a rural farm:

1. George Street/Fairfax Boulevard. Redevelopment began with the American Public University System's (APUS) academic center building, and the Green Corridor plan provides an option for completing this initiative (See Appendix B, B.3. Green Corridor Plan.)
2. Lancaster Circle at City Hall. This plan enhances pedestrian access, parking, and provide redevelopment sites that frame the circle.
3. Powhatan Place Town Center, at North Mildred Street and East Beltline.
4. A mixed-use neighborhood center at North Fairfax Boulevard and East Beltline Avenue.
5. A proposed connection between Fairfax Boulevard and Lakeland Place. This connection aids the completion of the Lakeland Place neighborhood.
6. Clay Hill Farm. A new neighborhood using the principles of "agrarian urbanism."
7. Jefferson Orchard. A proposed relocation of the Duffields MARC station and development of a Transit Oriented D in an intended growth urban area. This area is also proposed for an Industrial Special Industrial District that would utilize the rail access.

#7 states Jefferson Orchard would utilize rail access. Rockwool has stated publicly and to me personally that they have **no** plans to utilize rail access. This is in direct conflict with the Comprehensive Plan.

Continue to following page.

Jane M. Tabb
922 Old Leetown Pike
Kearneysville, WV 25430
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p. 36 Rural Land Objectives

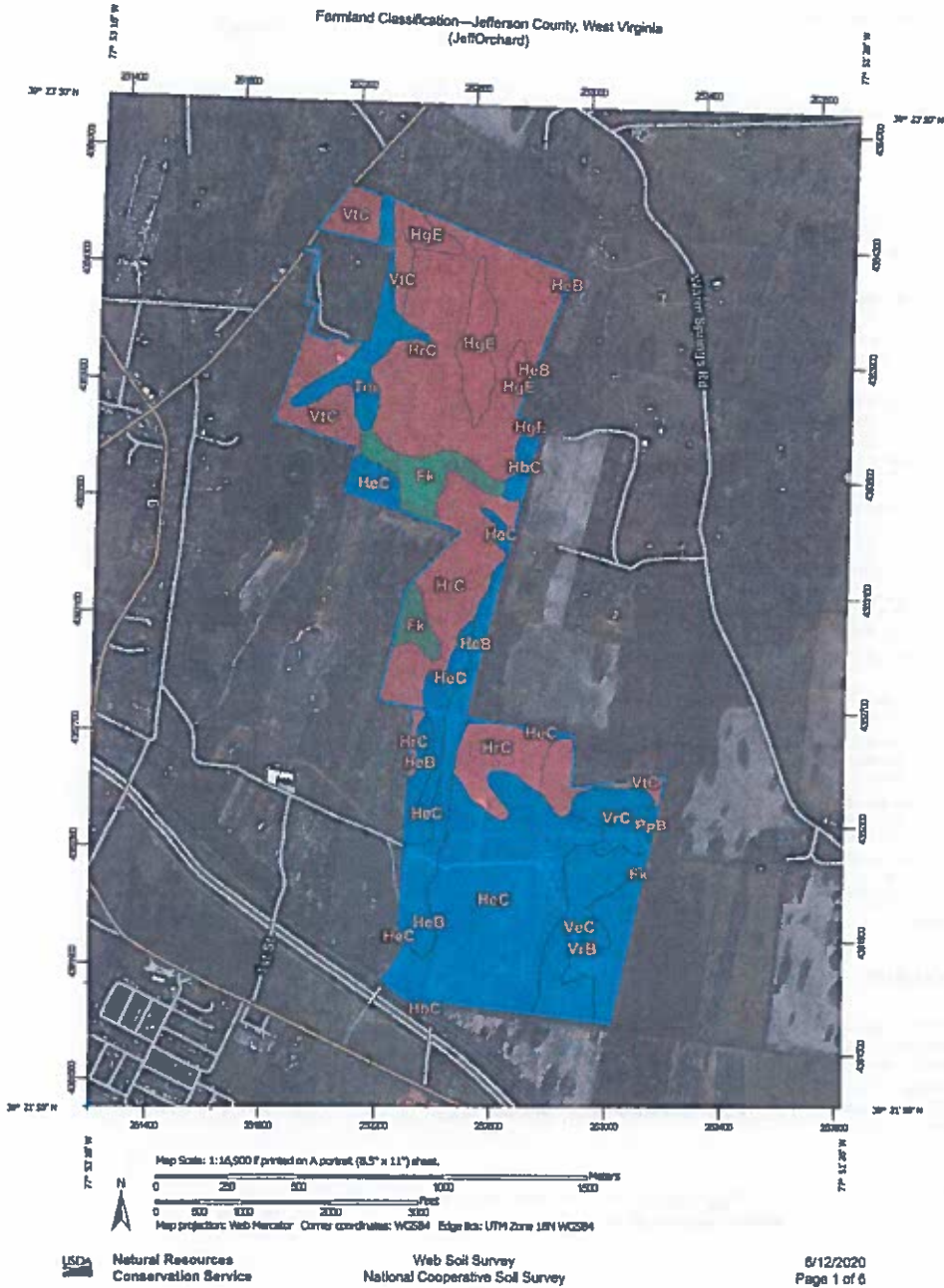
This classification makes much of the UGB eligible for agricultural conservation easements, should the landowners wish to pursue them.

Rural Lands Objectives

1. **Protect and enhance the agrarian heritage of land in the Urban Growth Boundary.** Such protection is not limited to the physical protection of land, but includes the retention and development of working farms.
2. **Consolidate development on rural land to preserve agricultural and open lands.** Developments on rural land should be compact, and should result in the conservation of unbuilt land. They should also be located to avoid prime farmland.

Continue to following page.

Jane M. Tabb
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Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Jane M. Tabb
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304-725-4325 vinemont.farm@gmail.com

Farmland Classification—Jefferson County, West Virginia

Jeff Orchard

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Fk	Funkstown silt loam	All areas are prime farmland	20.5	4.9%
HbC	Hagerstown silt loam, 8 to 15 percent slopes	Farmland of statewide importance	3.9	0.9%
HeB	Hagerstown silt loam, 3 to 8 percent slopes, very rocky	Farmland of statewide importance	27.0	6.5%
leC	Hagerstown silt loam 8 to 15 percent slopes, very rocky	Farmland of statewide importance	108.8	25.7%
HgE	Hagerstown-Opequan-Rock outcrop complex, 15 to 35 percent slopes	Not prime farmland	20.8	5.0%
HrC	Hagerstown-Rock outcrop complex, 8 to 15 percent slopes	Not prime farmland	130.9	31.6%
PpB	Poplinton silt loam, 3 to 8 percent slopes, very rocky	Farmland of statewide importance	0.8	0.2%
Tm	Toms silt loam	Farmland of statewide importance	17.2	4.1%
VeC	Vertrees silt loam, 8 to 15 percent slopes	Farmland of statewide importance	23.8	5.8%
VrB	Vertrees silt loam, 3 to 8 percent slopes, very rocky	Farmland of statewide importance	14.9	3.6%
VrC	Vertrees silt loam, 8 to 15 percent slopes, very rocky	Farmland of statewide importance	12.2	2.9%
VrC	Vertrees-Rock outcrop complex, 8 to 15 percent slopes	Not prime farmland	36.3	8.7%
Totals for Area of Interest			415.0	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Jane M. Tabb
922 Old Leetown Pike
Kearneysville, WV 25430
304-725-4325 vinemont.farm@gmail.com

The soil mapping of Jefferson Orchards proves that it is "farmland of statewide importance." A rezoning of the land would be the contrary to the Comprehensive Plan's "Rural Land Objectives." The Rockwool site effectively wipes out the "farmland of statewide importance" soils in the southern portion of the property.

While your decision may appear to you to be a "do over," it is not. Now is the time to examine carefully the recent past, the facts and opinions of your fellow citizens, the Ranson Comprehensive Plan and find that the rezoning of the Jefferson Orchards property is not compatible with the Comprehensive Plan and vote to DENY the request.

Thank you for your time and attention,

Jane Tabb, Jefferson County resident

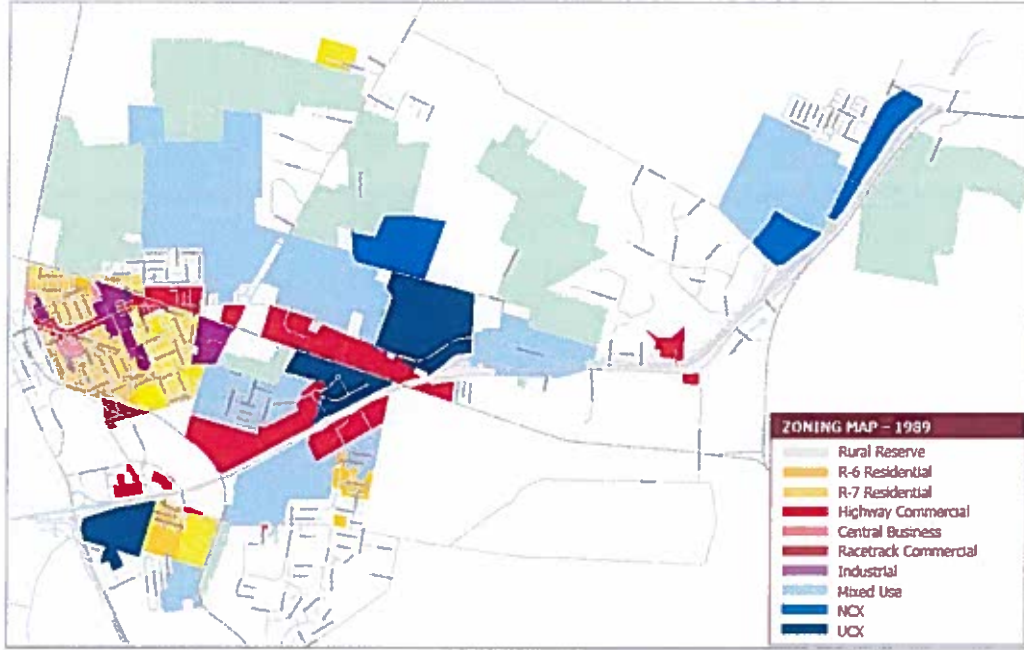
Jane M. Tabb
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XXIV/Appendix C 1989 Zoning Map
Jefferson Orchard is delineated as "Rural Reserve"

Jane M. Tabb
922 Old Leetown Pike
Kearneysville, WV 25430
304-725-4325 vinemont.farm@gmail.com



C.2. ZONING MAP - 1989



City of Ranson Zoning Map - 1989



ARCHITECTURE
ENGINEERING
FIELD SERVICES

June 17, 2020

Ms. Stacey Faltzgraff, City Clerk
City of Ranson
312 S. Mildred Street
Ranson, WV 25438

Via Email: SPfaltzgraff@ransonwv.us

RE: Ranson City Council Meeting
Proposed Ordinance #2017 – 302
Public Meeting June 23, 2020
Public Comment

Dear Ranson City Council,

I am writing this letter in support of Rockwool's current project within the City of Ranson. We have had the privilege of working with the Rockwool Design Team from the early conception of this project in 2017, when we were hired to provide civil engineering services related to this project.

It was very clear from the onset of this project that Rockwool wanted to not only meet but exceed regulatory requirements regarding the design and construction of their proposed plant in Ranson, WV. The karst terrain of Jefferson County was at the forefront of their design efforts from the very beginning. Geotechnical explorations were performed during the conceptual stages of this project so that the building footprints could be sited in the optimum locations on the site. Construction stormwater was addressed in accordance WVDEP guidelines relating to karst material and construction in the Chesapeake Bay watershed. Permanent stormwater measures were addressed in accordance with the City's MS-4 regulations. Permanent stormwater ponds were designed using impermeable liners. Additional geotechnical drilling was performed to aide structural engineers in their design efforts related to the foundations of these structures.

There has been constant collaboration amongst Rockwool, the site designers, geotechnical engineers and the environmental consultants to ensure that Rockwool's facility exceeds regulatory practices as it relates to Standard of Care in Karst material.

Sincerely,
THE THRASHER GROUP, INC.

Robert R. Milne, PE
Sr. Project Manager

Stacey Pfaltzgraff

From: Paula Tremba <p.tremba@icloud.com>
Sent: Tuesday, June 16, 2020 11:58 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I am a mother, grandmother, and retired Jefferson County elementary teacher. I have lived in Jefferson County for 44 years. I taught here for 23 years, some of those years were spent teaching 5th grade at North Jefferson Elementary School which is directly across from the rezoning site. My vocation as an educator, mother, and grandmother was and is to care for the health, safety, and well-being of the whole person, including mind, body, and soul. This ordinance #2017-302 will affect the health, safety, and welfare of our children and families. It does not align with the comprehensive plan: "...the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

I respectfully request that you vote no on ordinance #2017-302. The type of industry that this ordinance would allow in Ranson would put at risk the health and well being of children of Jefferson County.

The type of industry that ordinance #2017-302 would allow in Ranson would generate air pollutants like fine particulate matter, ozone, and sulfur dioxide. Exposure to these pollutants has devastating effects on children's health. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease. Developing fetuses whose mothers are exposed to air pollution are more likely to have impaired organ development which can lead to early cognitive deficits, neurodevelopmental defects and other physical, cognitive, and psychological deficits later in life. An association between autism and prenatal exposure to particulate matter in air pollution has been demonstrated in several studies. Many studies have shown that lower test scores in math, English, and language arts are associated with exposure to outdoor air pollution. Industrial activity allowed by ordinance #2017-302 would also increase the risk of groundwater contamination in Ranson and nearby municipalities. Children whose families rely on well water, as is the case in much of Jefferson County, may be affected by polluted water. Voting no on ordinance #2017-302 will prevent air and water pollution from negatively affecting the long-term health of children in Jefferson County and surrounding areas.

The economic and environmental harm caused by the type of industry that ordinance #2017-302 would allow would put additional stress on the parents, caretakers, and teachers of children in affected areas. The weakening and destabilizing of this support network would have negative effects on local children. Many households in Jefferson County depend on the local agriculture, tourism, and equine industries for income. If industrial activity in Ranson depresses these industries, the resulting financial strain on these households will introduce additional stress and uncertainty into children's lives. Households living in areas affected by particulate matter and regional haze will also suffer from the psychological effects of air pollution. Individuals living in areas with increase perception of pollution show increased levels of stress, anxiety, and unhappiness. School districts affected by increased air and water pollution may have trouble recruiting and retaining teachers. Teachers have a large influence on a child's daily life and, if educator quality and tenure decreases, the quality of this influence will diminish.

The site of the proposed rezoning in Ranson is across the road from an elementary school and proximal to lower-income neighborhoods. Observations like these demonstrate how ordinance #2017-302 would disproportionately affect vulnerable and historically-disadvantaged populations. The damaging health effects of air pollution have been shown to persist for at least three generations, so allowing certain types of industry in low-income areas would only compound existing disadvantages. Voting no on ordinance #2017-302 would be a step towards acknowledging that all individuals have the right to clean air and water.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” This zoning change would clearly adversely affect the health, safety, and welfare of the community. Children face increased exposure to air pollution adversely affecting their health, financial instability adversely affecting their welfare, groundwater contamination adversely affecting their safety, and environmental injustice and discrimination if ordinance #2017-302 is passed. Educators will face increased air pollution adversely affecting their health and consequently welfare. These adverse effects are all against Ranson’s Comprehensive Plan. Please vote NO on Ordinance #2017-302.

Sincerely,
Paula Tremba

--
Paula Tremba
p.tremba@icloud.com
Shepherdstown 25443

Stacey Pfaltzgraff

From: Randall Tremba <randytremba@me.com>
Sent: Tuesday, June 16, 2020 12:23 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

From Randall Tremba, Presbyterian Minister.

I am a Christian pastor. I served the Shepherdstown Presbyterian Church from 1976 to 2017. Forty-one years. My vocation as a pastor was and is to care for the health and well-being of the whole person, including mind, body, and soul. The Rockwool Plant is not only a danger to physical health, it threatens the spiritual well-being of us individually and collectively. It is a blight on the soil and soul of our community. People and councils make mistakes. It's what you do next that reveals true character. Do all you can to repair this injury to the law. Please preserve the soothing pastoral character of our county.

I respectfully request that you vote no on ordinance #2017-302. The type of industry that this ordinance would allow in Ranson would negatively affect tourism, economic agility, groundwater quality, and individual health in neighboring municipalities like Shepherdstown.

Tourism is critically important to Shepherdstown's economy and to the county as a whole. In 2018, tourist spending in the Jefferson County contributed over \$170 million to state and local government revenue and \$213 million in individual earnings. Importantly, most of this money comes from tourists visiting from neighboring states like Virginia, Maryland, and Washington D.C. Out-of-state tourists are largely drawn to Jefferson County because of its reputation for environmental-friendly, sustainable industry. Key elements that support this reputation include the county's pastoral scenery and pristine natural resources. Ordinance #2017-302 will allow industry into Jefferson County that risks harming these elements and dramatically reducing the area's appeal to visitors. The resulting harm to our tourist industry would drive away visitors and decrease state, county, and local revenue. The long-term success of Jefferson County's tourism industry is dependent on local governments making coordinated zoning decisions. Allowing certain types in industry in Ranson will negatively affect tourism in every municipality throughout the county, including Shepherdstown. Voting no on ordinance #2017-302 will protect the foundations of the county's tourism industry and protect the 7,040 jobs in Jefferson County that are directly supported by tourism.

The type of large, consolidated industry that ordinance #2017-302 would allow in Ranson would generally reduce the flexibility of local economies in Jefferson County. Historically, the driving industries in Jefferson County have been tourism, agriculture, and the equine industries. These three industries are large conglomerates of small businesses. Small business is very important to Sheherdstown. Small businesses have been shown to create more jobs, cultivate more innovation, and provide more opportunities than big, non-local firms. Additionally, small businesses have been shown to more reactive to sudden changes relative to manufacturing businesses. Bringing large, manufacturing-based industry into Jefferson county will depress the local economy and stifle innovation. During this time of economic upheaval and uncertainty, Jefferson County needs to support industries that will allow local economies to adapt and recover as fast as possible.

Voting no on ordinance #2017-302 will help protect water resources throughout Jefferson County. The type of industry that ordinance #2017-302 would allow puts the ground resources of Jefferson county at significant risk due to the karst hydrogeology. The site in Ranson is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams. In municipalities like Shepherdstown, many residents and nearby farms depend on wells for water. Contamination of groundwater aquifers would create both health and remediation concerns for local residents. Dye tests performed by the USGS near the area of proposed rezoning in Ranson have shown just how far-reaching groundwater contamination at the Ranson site could be. Results from the USGS study revealed measurable dye concentrations in Elk's Run, Rattlesnake Run, and even the Shepherdstown Town Run. This last run cuts through the center of Shepherdstown and is a favorite area for children to play and learn to fish.

Groundwater pollution is not the only concern for communities like Shepherdstown. The type of industry that ordinance #2017-302 would allow in Ranson would also generate air pollutants like fine particulate matter, ozone, and sulfur dioxide. These pollutants are particularly harmful to children. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease. The site in Ranson is across the road from an elementary school and also within the Jefferson High Middle district. Voting no on ordinance #2017-302 will prevent air pollution from negatively affecting the long-term health of children in Shepherdstown and all of Jefferson County.

I again request that you vote no on ordinance #2017-302. The long-term economic, environmental, and community health of municipalities like Shepherdstown depend on Ranson's participation in a coordinated zoning plan for all of Jefferson County.

Sincerely,

Randall Tremba

--

Randall Tremba
randytremba@me.com
Shepherdstown 25443

Stacey Pfaltzgraff

From: Linda Walker <artemis_lk@yahoo.com>
Sent: Thursday, June 18, 2020 3:13 AM
To: Stacey Pfaltzgraff
Subject: Request to Ranson Re #2017-302: VOTE NO to amend and re-enact official zoning map

CAUTION: External Email

Dear Ms. Faltzgraff,

I am a resident of Shepherdstown in Jefferson County. **I am writing to urge Ranson to vote no on ordinance #2017-302.** Jefferson County is not the place for heavy industry, but that is exactly the type of industry that this ordinance would allow in Ranson. That heavy industry would dramatically and negatively affect the health and well-being of people and nature in Jefferson County, as well as our county's appeal for tourists, small businesses and families, for generations to come.

What is most frightening to me as a parent, is the toxic air pollutants that ordinance #2017-302 would allow in Ranson that would have detrimental health impacts for our 4-year old son, who has struggled with respiratory issues. **Prevailing winds from heavy industry in Ranson at locations such as Jefferson Orchards if this ordinance is approved would blow primarily toward Shepherdstown.** Winds would **not** be dispersed as indicated by information submitted related to Rockwool, because that information was based on Martinsburg area data which has different prevailing winds. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease. Voting no on ordinance #2017-302 will prevent air pollution from negatively affecting the health of my son, and of residents of our county and surrounding regions.

I am also deeply troubled by the sequence that I understand took place to rush the past flawed rezoning attempt that this ordinance relates to, after years of careful planning had gone into the comprehensive plan for Jefferson Orchards - a plan that did **not** include heavy industry for that site.

Every time I drive over the crest of the hill on Route 340 from Harpers Ferry headed toward Charles Town and Ranson, I am calmed and inspired by the view of historic battlefields, rolling hills and agricultural fields. It sickens me to imagine that, if ordinance #2017-302 passes and Ranson continues to welcome heavy industry to the county, it will be smokestacks that instead dominate that scene, and transform it into one that is more like driving through the industrial zones of Interstate-81.

Voting no on ordinance #2017-302 will help protect water resources throughout Jefferson County. The type of industry that ordinance #2017-302 would allow puts the ground resources of Jefferson county at significant risk due to the karst hydrogeology. The site in Ranson is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams. Dye tests performed by the USGS near the area of proposed rezoning in Ranson have shown just how far-reaching groundwater contamination at the Ranson site could be. Results from the USGS study revealed **measurable dye concentrations even in Shepherdstown Town Run**, which is two blocks from our house and a favorite area for my son and his friends to play in.

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If this ordinance were passed, Ranson would essentially be dictating the downward trajectory of the rest of our county, including the tourism, agriculture, and the equine industries, for decades into the future. I again request that you **vote no on ordinance #2017-302**. The long-term economic, environmental, and community health of municipalities like Shepherdstown depend on Ranson's participation in a coordinated zoning plan for **all** of Jefferson County.

Thank you for considering these comments.

Sincerely,

Linda K Walker
204 S. King Street
Shepherdstown, WV 25443

Stacey Pfaltzgraff

From: Iveta Weiand <ivuks81@yahoo.com>
Sent: Wednesday, June 17, 2020 7:40 PM
To: Stacey Pfaltzgraff
Subject: Please Vote NO!!

CAUTION: External Email

Dear Ranson City Council!

Please vote NO on rezoning part of Jefferson Orchards for Special District Industry!! Please vote NO to Rockwool and any other heavy industry in Jefferson County!!! Please protect the travel and agriculture industry in this county!! Rockwool is not welcome! Heavy industry is not welcome here!! We do not need it! Please vote NO!!

I chose to settle down and raise my family in Jefferson County because of it's beauty and location, but I don't think I will stay here if Rockwool comes! But I don't want to move.. I feel like I will be forced to, if heavy industry comes to Jefferson County!! It will not be desired area to live or move to and raise your family. That would be heartbreaking for so many reasons!!

PLEASE VOTE NO!!!! PLEASE STOP HEAVY INDUSTRY!!

Sincerely,
Iveta Weiand
(Resident of Jefferson Co)

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kathy Welti <weltikd222@yahoo.com>
Sent: Monday, June 15, 2020 6:55 PM
To: Stacey Pfaltzgraff
Subject: Ranson rezoning

CAUTION: External Email

Please do not rezone the parcel of land that Rockwool wants to build on. Building so close to an elementary school or any of the area schools for that matter is unfathomable. Please consider the lives of these children and their future health.

Kathy

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Dana Werner <dwerner25@gmail.com>
Sent: Monday, June 15, 2020 11:15 AM
To: Stacey Pfaltzgraff
Subject: Stop Rockwool

CAUTION: External Email

I want my voice heard! I am AGAINST Rockwool being built in my home county of Jefferson. It was very dishonest how this company and the City of Ranson over ran the public's opinion of our civil rights to speak.

Thank you your time.

Dana Werner,
Hospitality Leader

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)



WEST VIRGINIA CHAMBER

To: The Ranson City Council
 From: Brian Dayton, VP, West Virginia Chamber of Commerce
 Date: June 16, 2020
 RE: Public Comments on Zoning

Thank you for the opportunity to submit public comments on the City of Ranson's proposed Industrial District Ordinance. The West Virginia Chamber of Commerce is the voice of business in West Virginia. Our members are located in all fifty-five counties of West Virginia and employ over half of our state's workforce. Our focus is on policies that lead to economic development, job creation and those things that lead to a brighter future for West Virginia.

The West Virginia Chamber has closely watched the developments surrounding the Stack Ordinance and the Industrial District Ordinance zonings that were approved by the City of Ranson and challenged by Jefferson County Vision. The West Virginia Chamber's interest in this subject mainly focuses on the effect such disputes can have on economic development and the ability to attract jobs to West Virginia.

At the heart of the issue are two sections of state code (§ 8A-7-8 and § 8A-7-9), which the Ranson City Council believed it properly followed when approving the zoning changes in 2017 that permitted construction to begin on the ROCKWOOL facility. The Circuit Court of Jefferson County found differently as a result of a legal challenge, and the Ranson City Council has been given the opportunity to address the Circuit Court's concerns by re-enacting the Industrial Zoning Ordinance that is in question. The city council has chosen to take that route and should be commended.

After the Stack Ordinance and the Industrial Zoning Ordinance were first approved in 2017, ROCKWOOL, which had been recruited into West Virginia, began investing significant resources on a new facility in Ranson. If these zoning ordinances are not re-enacted, ROCKWOOL would stand to lose a significant investment in West Virginia. This would have a chilling effect on West Virginia's ability to attract development and job creation – things that are much needed for the future success of our state.

The West Virginia Chamber of Commerce urges the Ranson City Council to re-enact the same zoning changes that were made in 2017 and allow this important economic development project to proceed. I would welcome any thoughts or comments you may have on this matter.

Sincerely,

Brian Dayton,
 Vice President of Policy and Advocacy, West Virginia Chamber of Commerce

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Public Comment for meeting on June 16, 2020, pertaining to Rezoning Request for Jefferson Orchards (Ranson District 8, Tax Map #12, Parcel 1)

While there are many inherent environmental and ethical reasons why the old Jefferson Orchards property *should not* be rezoned in any way allowing heavy industry - underlying karst geology creating a greater risk for water contamination, temperature inversions all too frequently consolidating air pollution, distortion of "SmartCode" that was meant to incorporate "smart" growth and environmentally-friendly "new urbanism" principles - West Virginia law itself actually *forbids* the locating of heavy industry near schools, in this case North Jefferson Elementary.

Specifically pertaining to the siting of schools, Title 126, West Virginia Department of Education Legislative Rule, Series 172, Policy 6200, Section 202.06 states, "For the safety of students, the site shall be located away from hazards and undesirable environments, such as: ... odoriferous plants or industries ... high pressure gas lines ... and property zoned as industrial."

If heavy industry, then no school.

By definition, a legislative rule is an administrative rule that has been adopted by a government agency, and it has the force of law. Through the argument of modus tollens (see below), it follows that the contrapositive also has the force of law.

If school, then no heavy industry.

Obviously, Section 202.06 was written with the intention of keeping West Virginia's school children out of harm's way. There need not be any confusion whether it implies heavy industry should not be located near a school. If a local board of education goes through all the work of finding an appropriate piece of land in compliance with Section 202.06, why would anyone believe that after the school is built, someone should be able to come along and rezone the property across the street and put up a polluting factory?

For all these reasons - environmental, ethical, and legal - it is therefore clear that the old Jefferson Orchards property *should not* and *cannot* be rezoned in any way that allows for heavy industry.

Sincerely,

Michelle Wheeler

Shepherdstown
June 10, 2020

Let H and S be defined as follows:

H: heavy industry

S: school

Basically, Section 202.6 states that *if H, then not S*.

Using the symbols of truth tables, an arrow (\rightarrow) is used for logical implication, connecting an antecedent with a conclusion. A squiggly line (\sim) is used for negation.

Therefore, we have the following meanings:

$\sim S$: no school

$H \rightarrow \sim S$: if heavy industry, then no school

Therefore, Section 202.6, again, can be written $H \rightarrow \sim S$.

Note that in general, a statement of logical implication is true in every case EXCEPT when the antecedent (in our case, H) is true and the conclusion (in our case, $\sim S$) is false.

Now, in determining whether heavy industry can exist near a school, we need to first state the two truths, that 1) we have a policy already stating that if heavy industry exists then school cannot exist (written $H \rightarrow \sim S$), and 2) a school exists (written S).

Using the symbols of truth tables, an upside-down V (\wedge) is used for the connector word "and".

Note that in general, a compound statement using "and" is true if and only if both simple statements are true.

Basically, we need to construct a truth table to arrive at the truth values for the following argument:

$$[(H \rightarrow \sim S) \wedge S] \rightarrow \sim H$$

translated

[(if heavy industry leads to no school) and there is a school] then no heavy industry can exist

H	S	$\sim S$	$H \rightarrow \sim S$	$(H \rightarrow \sim S) \wedge S$	$\sim H$	$[(H \rightarrow \sim S) \wedge S] \rightarrow \sim H$
True	True	False	False	False	False	True
True	False	True	True	False	False	True
False	True	False	True	True	True	True
False	False	True	True	False	True	True

The fact that the last column shows "True" for all situations means that we have a valid argument, that **no heavy industry can exist near a school**.

Stacey Pfaltzgraff

From: Rebecca White-Ayraud <Rabutton@me.com>
Sent: Tuesday, June 16, 2020 1:08 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote no on ordinance #2017-302. The type of industry that this ordinance would allow in Ranson would negatively affect tourism, economic agility, groundwater quality, and individual health in neighboring municipalities like Shepherdstown.

Tourism is critically important to Shepherdstown's economy and to the county as a whole. In 2018, tourist spending in the Jefferson County contributed over \$170 million to state and local government revenue and \$213 million in individual earnings. Importantly, most of this money comes from tourists visiting from neighboring states like Virginia, Maryland, and Washington D.C. Out-of-state tourists are largely drawn to Jefferson County because of its reputation for environmental-friendly, sustainable industry. Key elements that support this reputation include the county's pastoral scenery and pristine natural resources. Ordinance #2017-302 will allow industry into Jefferson County that risks harming these elements and dramatically reducing the area's appeal to visitors. The resulting harm to our tourist industry would drive away visitors and decrease state, county, and local revenue. The long-term success of Jefferson County's tourism industry is dependent on local governments making coordinated zoning decisions. Allowing certain types in industry in Ranson will negatively affect tourism in every municipality throughout the county, including Shepherdstown. Voting no on ordinance #2017-302 will protect the foundations of the county's tourism industry and protect the 7,040 jobs in Jefferson County that are directly supported by tourism.

The type of large, consolidated industry that ordinance #2017-302 would allow in Ranson would generally reduce the flexibility of local economies in Jefferson County. Historically, the driving industries in Jefferson County have been tourism, agriculture, and the equine industries. These three industries are large conglomerates of small businesses. Small business is very important to Sheherdstown. Small businesses have been shown to create more jobs, cultivate more innovation, and provide more opportunities than big, non-local firms. Additionally, small businesses have been shown to more reactive to sudden changes relative to manufacturing businesses. Bringing large, manufacturing-based industry into Jefferson county will depress the local economy and stifle innovation. During this time of economic upheaval and uncertainty, Jefferson County needs to support industries that will allow local economies to adapt and recover as fast as possible.

Voting no on ordinance #2017-302 will help protect water resources throughout Jefferson County. The type of industry that ordinance #2017-302 would allow puts the ground resources of Jefferson county at significant risk due to the karst hydrogeology. The site in Ranson is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams. In municipalities like Shepherdstown, many residents and nearby farms depend on wells for water. Contamination of groundwater aquifers would create both health and remediation concerns for local residents. Dye tests performed by the USGS near the area of proposed rezoning in Ranson have shown just how far-reaching groundwater contamination at the Ranson site could be. Results from the USGS study revealed measurable dye

concentrations in Elk's Run, Rattlesnake Run, and even the Shepherdstown Town Run. This last run cuts through the center of Shepherdstown and is a favorite area for children to play and learn to fish.

Groundwater pollution is not the only concern for communities like Shepherdstown. The type of industry that ordinance #2017-302 would allow in Ranson would also generate air pollutants like fine particulate matter, ozone, and sulfur dioxide. These pollutants are particularly harmful to children. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease. The site in Ranson is across the road from an elementary school and also within the Jefferson High Middle district. Voting no on ordinance #2017-302 will prevent air pollution from negatively affecting the long-term health of children in Shepherdstown and all of Jefferson County.

I again request that you vote no on ordinance #2017-302. The long-term economic, environmental, and community health of municipalities like Shepherdstown depend on Ranson's participation in a coordinated zoning plan for all of Jefferson County.

--

Rebecca White-Ayraud
Rabutton@me.com
Shepherdstown 25443

Stacey Pfaltzgraff

From: Elizabeth Willis <mcbeth@mac.com>
Sent: Tuesday, June 16, 2020 11:28 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

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I live across the Potomac from y'all. Your air becomes my air, and your water my water. Your decisions here affect my health and the health of my community.

I respectfully request that you vote no on ordinance #2017-302. The type of industry that this ordinance would allow in Ranson would have a negative effect on water and air quality in neighboring states such as Maryland.

The Potomac River provides drinking water and a source of recreation to Maryland residents. Water and air pollution generated within the Potomac River's watershed will inevitably contaminate this valuable waterway. The site of the proposed zoning change in Ranson is located within the Potomac River Watershed.

The type of industry that ordinance #2017-30 would allow in Ranson would utilize large water impoundments, in an area of known karst terrain. This water will be contaminant from several sources including particulate mater that has fallen out from the air emissions and process water. The West Virginia Department of Environmental Protection has published guidelines that specifically discourage extensive development in areas of karst terrain because of the vulnerability of karst aquifers to contamination by surface pollution. Karst features increase surface water and groundwater connectivity and any spills or surface releases quickly percolate into the groundwater. Additionally, sinkholes are common in karst terrain and can cause ruptures in wastewater impoundments. Even if appropriate attempts are made to contain and manage wastewater and other stormwater runoff on-site, there is still a high risk that wastewater could contaminate the groundwater through tears and catastrophic failure of wastewater impoundments. Contaminated groundwater in karst terrain can easily resurface in waterways several miles away, as shown by a USGS tracer study conducted near the site in to be rezoned. The USGS study detected tracer dye in multiple springs and waterways miles from the initial injection site in Ranson. All of these waterways drain into the Potomac River.

Mismanagement of wastewater could also lead to contamination of nearby surface waters. For example, the site of the proposed rezoning in Ranson is in the Rocky Marsh Run watershed. Rocky Marsh Run also drains to the Potomac River. Voting no on ordinance #2017-302 will preserve downstream water quality and help ensure that the Potomac River remains usable for Maryland residents.

Air pollution poses another risk to Maryland residents. The type of industry that ordinance #2017-302 would allow would generate air pollutants like fine particulate matter. According to the US EPA, fine particulates can travel 100s of miles from its original source. Air pollution related to industrial activity in Ranson could easily reach Maryland. Fine particulates have a greater affinity for carrying toxic compounds and their small size allows them to be inhaled more deeply into the lungs. Chronic exposure to fine particulate matter is associated with increased risk of several diseases including Alzheimer's in adults. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease among others. Fine particulate matter also exacerbates

regional haze which creates a visible reminder of air pollution. The psychological effects that arise from an increased perception of pollution include stress, anxiety, and unhappiness. Voting no on ordinance #2017-302 will help prevent increased air pollution from negatively affecting the long-term health of Maryland residents.

I again request that you vote no on ordinance #2017-302. Zoning decisions in Ranson and Jefferson County have an undeniable influence on the quality of life in neighboring states.

Sincerely,

--

Elizabeth Willis
mcbeth@mac.com
Frederick 21704

Stacey Pfaltzgraff

From: Rie Wilson <riewilson@me.com>
Sent: Monday, June 15, 2020 9:17 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I volunteer in the Shepherdstown Visitors Center and people come here to enjoy the clean, fresh, beautiful area. This industry could RUIN this. Please do what is right for all!

I respectfully request that you vote no on ordinance #2017-302. The type of industry that this ordinance would allow in Ranson would negatively affect tourism, economic agility, groundwater quality, and individual health in neighboring municipalities like Shepherdstown.

Tourism is critically important to Shepherdstown's economy and to the county as a whole. In 2018, tourist spending in the Jefferson County contributed over \$170 million to state and local government revenue and \$213 million in individual earnings. Importantly, most of this money comes from tourists visiting from neighboring states like Virginia, Maryland, and Washington D.C. Out-of-state tourists are largely drawn to Jefferson County because of its reputation for environmental-friendly, sustainable industry. Key elements that support this reputation include the county's pastoral scenery and pristine natural resources. Ordinance #2017-302 will allow industry into Jefferson County that risks harming these elements and dramatically reducing the area's appeal to visitors. The resulting harm to our tourist industry would drive away visitors and decrease state, county, and local revenue. The long-term success of Jefferson County's tourism industry is dependent on local governments making coordinated zoning decisions. Allowing certain types in industry in Ranson will negatively affect tourism in every municipality throughout the county, including Shepherdstown. Voting no on ordinance #2017-302 will protect the foundations of the county's tourism industry and protect the 7,040 jobs in Jefferson County that are directly supported by tourism.

The type of large, consolidated industry that ordinance #2017-302 would allow in Ranson would generally reduce the flexibility of local economies in Jefferson County. Historically, the driving industries in Jefferson County have been tourism, agriculture, and the equine industries. These three industries are large conglomerates of small businesses. Small business is very important to Sheherdstown. Small businesses have been shown to create more jobs, cultivate more innovation, and provide more opportunities than big, non-local firms. Additionally, small businesses have been shown to more reactive to sudden changes relative to manufacturing businesses. Bringing large, manufacturing-based industry into Jefferson county will depress the local economy and stifle innovation. During this time of economic upheaval and uncertainty, Jefferson County needs to support industries that will allow local economies to adapt and recover as fast as possible.

Voting no on ordinance #2017-302 will help protect water resources throughout Jefferson County. The type of industry that ordinance #2017-302 would allow puts the ground resources of Jefferson county at significant risk due to the karst hydrogeology. The site in Ranson is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams. In municipalities like Shepherdstown, many residents and nearby farms depend on wells for water.

Contamination of groundwater aquifers would create both health and remediation concerns for local residents. Dye tests performed by the USGS near the area of proposed rezoning in Ranson have shown just how far-reaching groundwater contamination at the Ranson site could be. Results from the USGS study revealed measurable dye concentrations in Elk's Run, Rattlesnake Run, and even the Shepherdstown Town Run. This last run cuts through the center of Shepherdstown and is a favorite area for children to play and learn to fish.

Groundwater pollution is not the only concern for communities like Shepherdstown. The type of industry that ordinance #2017-302 would allow in Ranson would also generate air pollutants like fine particulate matter, ozone, and sulfur dioxide. These pollutants are particularly harmful to children. Children exposed to air pollution have an increased risk of developing asthma, cancer, diabetes, mental health issues, and cardiovascular disease. The site in Ranson is across the road from an elementary school and also within the Jefferson High Middle district. Voting no on ordinance #2017-302 will prevent air pollution from negatively affecting the long-term health of children in Shepherdstown and all of Jefferson County.

I again request that you vote no on ordinance #2017-302. The long-term economic, environmental, and community health of municipalities like Shepherdstown depend on Ranson's participation in a coordinated zoning plan for all of Jefferson County.

--

Rie Wilson
riewilson@me.com
Shepherdstown 25443

Stacey Pfaltzgraff

From: Michael Wisniewski <wwwisniewski@gmail.com>
Sent: Wednesday, June 17, 2020 9:38 AM
To: Stacey Pfaltzgraff
Subject: Rezoning for heavy industry

CAUTION: External Email

Dear Ms. Pfaltzgraff,

Without question the rezoning of a section of Ranson for heavy industry and the deference shown to Rockwool has been controversial and raised significant concerns by the citizens of Jefferson County. This has included people from all walks of life, from all political parties, and from all faiths. Given the level of concern, it just does not make sense to make a decision on rezoning that will favor Rockwool. Even an impartial person could clearly see that so many things associated with the process of bringing Rockwool to the county were done in "back rooms" and "under the table" to avoid the outcry that would come from the public.

I have hosted many foreign students and scientists when I was employed by the federal government as a scientist. All of them enjoyed the pastoral setting of Jefferson County and all that it has to offer in terms of nature, the arts, beautiful towns, and a vibrant farming community. The bringing of heavy industry would greatly diminish and in time completely eliminate that image of Jefferson County and its reality. It simply does not make sense to approve the rezoning for heavy industry, The karst geology of the region cannot handle the potential contamination of our groundwater that would ensue and the endangerment to the health of the entire community that would follow from contaminated groundwater and from the level of air pollution that is projected if the environmental conditions are not perfect. We already have a pandemic that threatens our lungs, especially of older citizens, and those with respiratory conditions. Do we really need to add to this at this fragile time in our history?

The job and income opportunities provided by the rezoning are dwarfed by the jobs that will be lost as people and livelihoods begin to move elsewhere. People love to retire in Jefferson County because of quality of life. Losing these people will greatly diminish your tax base as home prices begin to decline when people are no longer interested in living close to heavy industry. Jefferson County will also have to deal with the many lawsuits that will ensue by groups and people within the county and from governments in surrounding areas of Maryland and Virginia that are actively working to preserve their quality of life and pastoral landscape. How can rezoning be a good option?

Does your commission want to be remembered for this controversy and for driving future generations out of Jefferson County? I urge you to do the right thing, vote no on the rezoning for heavy industry. It was a bad idea to begin with and has simply grown worse as more light is cast on the process that led to this juncture, and the implication it has for the future of Jefferson County.

Sincerely,

Dr. Michael Wisniewski
 Shepherdstown, WV

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Keegan Woche <kwoche@icloud.com>
Sent: Tuesday, June 16, 2020 6:25 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

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I respectfully ask you to vote NO on Ordinance #2017-302. The industry this zoning change will allow for endangers the health, safety and, welfare of the community, and violates the premise of the smart code zoning that we have spent so much time, effort and federal money employing.

Any change in zoning needs to align with the comprehensive plan. In Ranson's current comprehensive plan (2012), the city only refers to "heavy industry" in the history section. Here it is characterized as part of a bygone era that has been replaced by an emphasis on agriculture for local food production, open spaces, and quality-of-life. In the remainder of the document, the word industry is used loosely to describe businesses including flower shops and shoe stores. Nothing that resembles the industry that this zoning change will provide for is described in the current comprehensive plan of Ranson.

In the land use section of the comprehensive plan, number ten states:

"Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The comprehensive plan clearly states that the city will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. This change in zoning clearly negatively affects the health, safety, and welfare of the community.

As the zoning is proposed, the industry that this zoning change will allow for will be directly across the street from houses, parks and other small businesses. A densely populated subdivision and an elementary school already exit directly across the street. While these latter community sections are not in the city limits, the effect of this zoning on them should still be considered just the same as it would be if they were in the city limits.

The industry that this zoning change will provide for will produce particulate, gaseous, and hazardous air emissions. These emissions have been shown to be detrimental to human health at every stage of life from embryo to old age. In utero and childhood exposure are the most damaging with lasting effects being realized through out life, and with maternal exposure the effects can be felt for generations. Multiple organ systems are affected including respiratory, cardiovascular, neurologic, immune, and endocrine causing defects in multiple processes including in utero development, neurodevelopment, immune and tolerance development, and cognitive defects. There are also psychological, social, and economic effects from both perceived and actual air pollution in both children and adults. Many of these effects can be seen even with short-term exposure or exposure that is lower than the levels recommended by the US Environmental Protection Agency and World Health Organization. These consequences are

devastating to the individual and depressing to the local community and economy. State law does not allow a school to be built next to industry that this zoning will allow but yet we are contemplating changing the zoning so this industry can build next to a school. This does not make sense. As Ranson residents, we want Ranson to follow the lead of the state and keep polluting industry away from kids. In these ways, this change in zoning will negatively affect the health and welfare of the community.

In addition to the health effects of the air emissions is the threat to groundwater from the industry that this zoning change would allow. The land in question has karst hydrogeology and therefore very high aquifer vulnerability and is not appropriate for this industry. With the type of industry this zoning will provide for, combined with high aquifer vulnerability, the likelihood of groundwater contamination is too high for the community and region to bear. A USGS study demonstrated that contamination in the groundwater adjacent to the site moves relatively quickly and can be found in wells and surface water structures in a variety of locations in the County. In this way, contamination at the site would affect the drinking water of the great majority of Jefferson County residents. Through the surface water connections, the water at the site also affects the water resources of the region.

Aquifer vulnerability has been used by policy makers for decades to set land use regulations. The guiding document, from the WVDEP, Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." In Ranson, we need to follow this advice and not change the zoning of this land for use by industry that has among the highest aquifer vulnerability in the County. This zoning change will endanger the safety of the community and region by endangering the safe water resources. As Ranson residents, we want to safeguard the water resources of the county and region by following the WVDEP guidance here.

Further, by reallocating this transect district and replacing it with a monolithic block of Special District Industrial designation, hundreds of housing units, parks and space for small businesses are lost. Ranson loses the potential for property tax on these properties and their improvements, Business and Occupational tax on the businesses and sales tax in retail stores. The community loses out on the opportunity to develop affordable housing and create locations where people can live, work, play, and shop all in the same place reducing the need for travel.

Worse yet apparently a deal has been made where the entity that owns the subject land has required that a litany of things not be built on the adjacent land essentially stripping the purpose of the smart code transect zone that exists there. Transect zones in the smart code are meant to transition, from out to in, and provide communities where people can safely work and live in close proximity in an effort to reduce travel. Excluding many of the components of the transect zone effectively eliminates the features that make it a transect zone, thus, losing the benefits a transect zone offers the community and city. By losing these benefits, reducing the overall and affordable housing prospects, and reducing so drastically the opportunities for city income, this zoning change will negatively affect the welfare of the community.

As Ranson residents, we find it odd that we are changing zoning to provide for industry that we would not put in the middle of our town close to our residents, but we are placing it close to the homes of county residents. Further, it is striking that the area where this change in zoning is directly adjacent to historically underserved lower income communities and a Title I school. This amounts to environmental injustice and cannot be tolerated.

The purpose of zoning is for a city to protect the health, welfare, morals and safety of the community. In this case, the air emissions and heavy truck traffic will endanger the communities' health. The threat of water contamination will endanger the safety of the community. The effect of lost productivity and decreased workforce participation due to increased illness and the negative effect the air emissions and presence of such a factory will have on the local economy will negatively affect the welfare of the community. The environmental injustice of changing the zoning to accommodate such polluting industry in a location where your municipality has no residents, but yet hundreds of low income and underserved county residents live is egregiously amoral. This must not happen. We respectfully implore you to do the right thing and vote no on ordinance #2017-302.

Sincerely,

--

Keegan Woche
kwoche@icloud.com

Stacey Pfaltzgraff

From: Darius ZaGara <darius07@googlemail.com>
Sent: Tuesday, June 16, 2020 10:33 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

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Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will “not adversely affect the health, safety, or welfare of the community.” To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Darieus ZaGara
darieus07@googlemail.com
Charles Town 25414

Stacey Pfaltzgraff

From: Edward Zahniser <eddzahniser@comcast.net>
Sent: Tuesday, June 16, 2020 4:08 PM
To: Stacey Pfaltzgraff
Cc: Than Hitt; sirimcdonaldwv@gmail.com; Bill Howard; Jim Stovall; Gusti Newquist
Subject: Citizen comments on Ranson rezoning

CAUTION: External Email

Dear members of the Ranson City Council

My wife Christine Duewel and I, citizens of Jefferson County, request and urge you to reject the ordinance to rezone for Special District Industrial and instead to restore the Ranson Renewed Vision.

The ordinance as proposed would not protect the citizens, lifeways, health, and nature of Jefferson County. It would instead protect Rockwool's assaults on our citizens, lifeways, health and nature. This is perverse public policy, to say the least. Recall that Rockwool is prohibited by law to do in their home country what they propose to do in all our very backyards!

As Judge Hammer's decision on the court case showed, this whole venture was suspect from the very start, so much so that it had to be carried out in a near-clandestine manner by your body, acting more as a private interest group than as a deliberative public body.

The Rockwool fiasco is obviously not in the interests of we citizens of the county. It would be less expensive and far more effective to just pay the "in lieu of taxes" give-away to social services agencies and functions in the county. That would save the entire county and its citizenry—not to mention nearby schools—the degradation of our environment and public health. Indeed, the social services impact would save the county the environmental degradation and instead actually contribute to the county's health and welfare.

None of us should ever lose sight of the incontrovertible fact that our county is underlain by Karst topography. This means that the lion's share of our county can be woefully impacted by the ready — one might also say "predictable" — degradation of our entire aquifer even by site-specific pollution such as from the projected Rockwool Site.

Sincerely,
 Edward D. Zahniser
 Christine H. Duewel
 122 Hensel Drive
 Shepherdstown, WV 25443

Attachment: 20200623 - Written Comments - Packet #8 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kristin Alexander <kristin@potomacaudubon.org>
Sent: Thursday, June 18, 2020 4:51 PM
To: Stacey Pfaltzgraff
Subject: Letter for City Council
Attachments: RansonRezoning.pdf

CAUTION: External Email

Hi, Stacey!

I hope you are doing well and staying safe.

Attached is a letter containing PVAS's comments for ordinance #2017-302.

Thank you so much!

All my best,

Kristin

--

Kristin Alexander
Executive Director
Potomac Valley Audubon Society
304-676-3397

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)



Potomac Valley Audubon Society

www.PotomacAudubon.org | P.O. Box 578, Shepherdstown, WV 25443 | 681-252-1387

June 17, 2020

Ranson City Council
312 S Mildred St
Ranson, WV 25438

Council Members:

The members of the Potomac Valley Audubon Society urge you to vote against proposed ordinance #2017-302 that amends and re-enacts the official zoning map of the City of Ranson pursuant to Ranson Municipal Code 19-20 and Chapter 19A, Article 1: 'Jefferson Orchards' reallocating Transects Districts (District 8, Tax Map 12, Parcel 1).

Through this action you have the opportunity to remain true to the Vision shared in the Ranson Comprehensive Plan enacted in 2012 which includes the stated values "maintain the quality of life and the community...recognizing and protecting the natural resources..."

Potomac Valley Audubon Society has a strong interest in the protection of natural resources through the protection of air, water, wildlife, and natural areas. We have partnered with the City of Ranson in the past with tree plantings and planning Flowing Springs Park in the spirit of jointly promoting open space and natural areas for the community's health, education and enjoyment.

We encourage Ranson to apply principles found within your comprehensive plan to support Smart Growth that includes the preservation of open spaces for the health and well-being of people as well as the natural world. Returning to the original concept for development of Jefferson Orchards would help to maintain some of the rural and natural areas. These provide habitat for wildlife including the avian population - some of which permanently reside here while others migrate through this region. The following features of the comprehensive plan support these objectives:

3.1.4 Rural Lands Objectives

1. Protect and enhance the agrarian heritage of land in the Urban Growth Boundary.

2. Consolidate development on rural land to preserve agricultural and open lands.

4.4 Recreation

Moreover as the vicinity of Ranson and Charles Town intensify in use, parkland for quiet contemplation available in unstructured parkland may have to be intentionally provided to residents.

Recreation Objectives

1. Maintain a network of open space types.

Potomac Valley Audubon Society is people dedicated to preserving, restoring and enjoying the natural world through education and action.
Join or donate today! Learn more at www.PotomacAudubon.org.
EIN#: 55-0626891

Provide parks and recreation facilities that balance the needs for active and passive recreation with larger parks to ensure that each facility provides the broadest range of recreational opportunities to its serving population.

6. Seek opportunities to develop land for unstructured recreation in a natural setting, particularly around low land and ravines.

One of the high priorities for Potomac Valley Audubon Society is the protection of our water and the sensitive watersheds within Jefferson County. With predominantly a karst topography, our landforms are especially vulnerable to sinkholes. Within the Ranson Comprehensive Plan is the consideration for conservation efforts related to sinkholes. Therefore, we recommend that the concentration of sinkholes as well as the headwaters of a number of streams in Jefferson County be protected through conservation measures on the Jefferson Orchard property.

4.4.1 Civic and Open Space Types

Existing Conditions

3. Conservation - In addition to providing space and facilities for leisure activity, park systems often include conservation land. Examples of conservation space include streambeds, wetlands, flood plains and their buffers, steep slopes, forestland, sinkholes, wildlife habitats, and other unique natural features and resources.

Civic and Open Space Types Objectives

1.c. Land for conservation and unstructured recreation should be located in more rural areas, and where there are ecological benefits for locating them. They should also be connected to each other according to the principles of land ecology, which emphasizes continuous pathways for wildlife.

Potomac Valley Audubon Society is concerned that rezoning the proposed area to Special District Industrial would have the following impacts:

1. **Threats to Air Quality:** PVAS encourages people to be outdoors. The addition of emissions from future industry to air quality in Jefferson County poses a threat to all residents but particularly to the most vulnerable in society—the children, the elderly, and those with compromised respiratory systems.
2. **Threats to Water Quality:** PVAS is concerned that atmospheric deposition of pollutants originating from industries on this property will contaminate streams and wetlands. We are further concerned about the viability of potential onsite wastewater settling ponds. WV does not have a good record of regulating slurry ponds at mountaintop removal sites where leakage from ponds has poisoned local aquifers, wells, and streams.
3. **Threats to Streams, Wetlands, and Rare Marl Marshes:** The health of streams, wetlands, and

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and the Combined Federal Campaign (#29061).*



marl marshes and the valuable habitat they support is dependent on the elevation of the water table. Industry often withdraws enormous quantities of water every day. Furthermore, the internal underground drainage systems in karst areas like those found in Jefferson County are very sensitive to extraction. Removing this much water from the aquifers can have very serious and unpredictable adverse consequences. Lowering of water tables can affect the hydrologic equilibrium of local streams as well as wetlands, including rare marl marshes, at substantial distances from the point of extraction. The potential impact is loss of critical wetland and riparian habitat for threatened and endangered species of plants and other forms of wildlife.

4. Threats to Endangered, Threatened, and Rare Species: In addition to the twenty-seven rare species found in our local marl marshes, there is one federally-listed Threatened Species identified in Jefferson County: the Madison Cave Isopod. This isopod, a small crustacean that lives in groundwater, has been documented in three locations in Jefferson County including two sites near the proposed area of rezoning. There are other species of great concern found in streams, marshes, fields and ridges in our area. For example, the WVDNR identified several "High Quality and State Mussel Streams" in Jefferson County including Evitts Run, Bullskin Run, Elks Run, and Long Marsh Run. The USFWS and the WVDNR also maintain lists of species of concern. The Baltimore Checkerspot butterfly and Sedge Wren have also been identified at our Cool Spring Preserve, and are both conservation species of concern. Industry on the proposed site could contribute atmospheric emissions that would have significant impact on species of concern.

5. Threats to Migratory Birds: PVAS has a particular interest in not only the indigenous bird populations, but migratory birds as well. Positioned on the Atlantic Flyway and immediately to the east of the Allegheny Front, many migrating birds take advantage of the winds that waft off the mountains and ridges of the Appalachian range to mitigate the challenges to their biennial long-distance flights. By definition, all migratory birds are protected under the Migratory Bird Treaty Act, which not only protects the birds themselves but also sets stipulations to protect habitats necessary for the birds' survival. The air emissions from the potential industry, especially particulate matter, will create hazards to migrating birds using the Atlantic Flyway.

In light of these threats, we encourage the Ranson Town Council to heed their well-developed and forward thinking Comprehensive Plan to re-direct efforts to restore the more sustainable use of the Jefferson Orchard property for the benefit of all of the citizens of Jefferson County. We urge Ranson City Council to reject the ordinance to rezone for Special District Industrial and restore the Ranson Renewed vision.

In the Spirit of Community,



Suzanne Offutt, President
Potomac Valley Audubon Society

*A proud partner of the United Way of the Eastern Panhandle
and the Combined Federal Campaign (#29061).*



Stacey Pfaltzgraff

From: daphne andrews <daphne.andrews@yahoo.com>
Sent: Thursday, June 18, 2020 2:54 PM
To: Stacey Pfaltzgraff
Subject: Proposed ordinance

CAUTION: External Email

Dear Ranson City Council,

I am writing to encourage the City of Ranson's City Council to adopt the Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)". It is time to move past the false narrative being pushed by destructive environmental radicals who seek to destroy Ranson's progress. The City Council previously made the decision to rezone the property in question and hundreds of millions of dollars have been spent by private and public entities based upon Ranson's governmental act. Failure to adopt the Ordinance will subject Ranson to years of costly and needless litigation (that it will lose), which will force Ranson to cut public services to Ranson's citizens.

Sincerely,

Sent from my iPhone

"All things are Possible through Christ who Strengthens Me"

Daphne Andrews
 Cell .703-231-7588

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Justin Bedard <Justin.Bedard@erm.com>
Sent: Thursday, June 18, 2020 4:24 PM
To: Stacey Pfaltzgraff
Subject: Public Comments on Proposed Ordinance #2017-302
Attachments: RAN-5 Justin Bedard Public Comments.pdf

CAUTION: External Email

Dear Ms. Pfaltzgraff

I hope this email finds you well. Attached you will find my comments on Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)". If you have any questions concerning the content of the attachment, please do not hesitate to contact me.

Sincerely,

Justin Bedard
Principal Consultant, Cultural Heritage/Archaeology

ERM
 1776 I Street, NW | Suite 725 | Washington, DC 20006
 T +1 202 466 9090 | M +1 202 412 4794
 E justin.bedard@erm.com | W www.erm.com

http://minerva.erm.com/aboutERM/BrandIdentityPictures/ERM_logo_and_strapline_for_email_signature.PNG
 style='width:172.5pt;height:52.5pt;visibility:visible;mso-wrap-style:square;mso-left-percent:-10001;mso-top-percent:-10001;mso-position-horizontal:absolute;mso-position-horizontal-relative:char;mso-position-vertical:absolute;mso-

position-vertical-relative:line;mso-left-percent:-10001;mso-top-percent:-10001'>

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Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

ERM

18 June 2020

Page 1

18 June 2020

Ranson City Council
312 S. Mildred St.
Ranson, WV 25438

Subject: Comments on Proposed Ordinance #2017-302

Dear Ranson City Council:

Please accept these comments on Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)".

Roxul USA, Inc. ("ROCKWOOL") performed detailed investigations in consultation with the West Virginia State Historic Preservation Office (SHPO) to identify and assess cultural resources prior to the development of the above referenced property (hereinafter referred to as the "RAN-5 Site" or "Site"). Activities were carried out as part of compliance with the National Historic Preservation Act of 1966 (NHPA) and its implementing regulations (36 CFR 800), as well as state requirements covering both potential archaeological and architectural resources.

Literature reviews conducted as part of the cultural resource assessments indicated that approximately 52.3 acres of the proposed RAN-5 Site had been previously investigated for cultural resources in the recent past. The West Virginia Division of Highways conducted two archaeological surveys on the site in advance of establishing soil borrow areas used to support the construction of State Route 9. Neither of these previous investigations by the WVDOH identified historic properties as defined in the NHPA.

ROCKWOOL performed a series of cultural resource investigations from 2017 through 2019 in a series of reports provided to SHPO for review and comment. Investigations consisting of test pits, metal detector transects, visual observations, view shed analyses and literature reviews for the site and surrounding vicinity were carried out as part of compliance with Section 106 of NHPA. Investigations on the RAN-5 Site were conducted to identify archaeological resources and/or historic standing structures that could potentially be directly impacted by construction. The literature review and field surveys within a 1-mile radius of the Site were conducted to determine if construction of the site would result in indirect, visual impacts to historic standing structures.

Results of the investigations indicated the following:

- No significant archaeological resources were identified on the RAN-5 Site;
- No adverse effects on resources eligible for or listed on the National Register of Historic Places (NRHP); and,
- No adverse effects on historic properties.

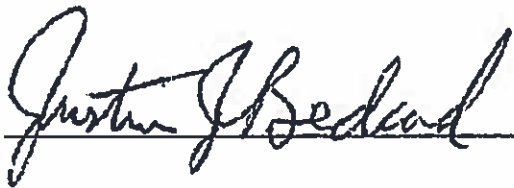
West Virginia SHPO stated that no further consultation was necessary regarding architectural or archaeological resources.

In a letter dated 5 June 2017, ROCKWOOL notified the Jefferson County Historic Landmark Commission (JCHLC) of the proposed development of the RAN-5 Site, offering the Commission the opportunity to provide comments or request additional information about the project. No comments, questions, or concerns were received from the JCHLC within the requested 30-day timeframe. This was reported to SHPO in a letter dated 24 July 2017.

In summary, Rockwool has thoroughly assessed cultural resources in and around the Site in accordance with applicable state and federal regulations and to the satisfaction and approval of the West Virginia SHPO. This effort has also included reaching out to the local historical organization.

Thank you for the opportunity to submit these comments for consideration by the City of Ranson.

Sincerely,

A handwritten signature in black ink that reads "Justin J. Bedard". The signature is written in a cursive style and is positioned above a horizontal line.

Justin J Bedard
Principal Consultant, Cultural Heritage/Archaeology
ERM

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully ask that you vote NO on Ordinance #2017-302. We live within 1 ½ miles from the proposed site. I have been a homeowner and Taxpayer in Jefferson County since 1977. I currently own my property at 4922 and 4984 Charles Town Road. Each of my children also currently own a 2 acre lot on each side of me, in hopes of building homes for their families. The building has stopped, and is currently on hold for now, pending your approval of heavy Industry at this site. Both of my children were born and raised in Jefferson County and are currently raising their families here also. If Rockwool is permitted to continue building, we will have to sell all three properties and move away, if that's even possible, who will buy our homes, knowing the air and water will be contaminated by heavy industry. I do not feel that we can continue to live here in the midst of a factory that burns 84 tons of coal a day and will release 156,000 tons of toxic pollution a year, including phenol, benzene, methanol, formaldehyde, and PM 2.5 into the air around our home. We have private wells on our property, and no availability for public water. I am extremely concerned that the air quality here and the water supply will be greatly affected by the heavy toxins being released in the air and the water supply will be contaminated by the toxins allowed to seep into the current sinkholes and the ground saturation of these toxins from the Rockwool site.

This area of the County has the highest concentration of sinkholes in the entire County. We have discovered a 3 ft diameter sinkhole in our backyard in 2018, it has doubled in size since then, and continues to grow. The sinkhole is located in my backyard and is within 25 ft of where the new pipeline was just installed, along the bike path last year. I also personally discovered sinkholes in the area where the pipeline was installed. I called the DEP and was blocked from entering the area until the work was completed. They were worried I would take pictures, of the pipeline being installed over existing sinkholes, and expose the faulty, unsafe work.

The subject land has been well studied by Dr. Kozar, the area in question and described in the scientific literature, and USGS reports as having karst hydrology with very high aquifer vulnerability. The karst landscape is a consequence of the presence of soluble bedrock, which consists of limestone in the case of the subject land. In such landscapes water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways. Karst aquifers are known to be "extremely vulnerable to pollution" due to direct connection between the surface water and groundwater through both point (sinkholes) and diffuse (everywhere) infiltration. It is known from the Voluntary Remediation Plan of Jefferson Orchard that the groundwater at the subject site is only 60 feet below the ground. The subject property and much of the property around it are on an upland plain with few surface streams, but great seasonal variability in the water table resulting in numerous estavelles and large amounts of water in the epikarst. This water is easily contaminated and this contamination spreads quickly throughout the aquifer. Dye tests performed near the subject site by the USGS have demonstrated this quick moving thorough disbursement in the aquifer in this area. While this contamination goes on to affect springs at the margins of the upland area continuing on in streams that service municipal water sources and the Potomac River, our concerns are far more immediate in both time and distance. Well water is the only water source available in the area of the proposed zoning change and, with the exception of Fox Glen, a majority of this water is supplied by private wells. Therefore, the groundwater aquifer fulfills a critical necessity, fulfilling all needs including human consumption, household uses, and agriculture and maintenance of livestock and horses in the immediate area around the site. The concern is that if the aquifer becomes contaminated, then the local drinking water will be fouled.

For decades now, policy makers have been using "Aquifer Vulnerability," to set land use and water resource protection policy. Karst has very high Aquifer Vulnerability. Therefore, this industrial use is not appropriate for this land and it should not be zoned for it. The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in

these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”

The Chesapeake Bay Stormwater Network karst stormwater guidance document the CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, which the WVDEP cites in its own guiding document Stormwater Management Design in Karst Areas, clearly agrees stating:

“First, the effect of land development on karst terrain is complex and hard to predict, and requires professional analysis to reduce the risk of geological hazards, damage to infrastructure and groundwater contamination.” “The working group acknowledges that past approaches to stormwater and land development in karst terrain have been inadequate to safeguard the public and the environment.” “...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.” We clearly need stronger comprehensive land use plans and zoning that direct new growth away from karst areas to more appropriate locations. Ordinance #2017-302 is literally the opposite of this.

Further, we cannot rely on the WVDEP to do the job that good local land use guidelines and zoning should do. For example, the CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed states that detention and retention ponds are not recommended on karst and categorize them as discouraged. Also, quoting WVDEP’s own karst guidance: “attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Yet the entity currently planning to utilize this zoning change is planning employment of multiple massive retention ponds and attenuating surface runoff completely. This has already been approved by the DEP in two Construction Stormwater General Permit registrations for that company. One of detention ponds is not even regulated by the DEP as it contains process water and has no outlet. Clearly the DEP recognizes the risks but is not appropriately limiting them. Relying on the DEP to protect the public health, safety, welfare, and the environment from any entity in these karst locations is simply as the CNS bulletin said it “inadequate to safeguard the public and the environment.” We must have appropriate zoning that takes into consideration appropriate use of land with karst hydrogeology. Ordinance #2017-302 does not do this, but instead increases the risk to the public and the environment.

A second serious concern is the air emissions from the industry that this zoning will provide for. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. These types of air emissions have been shown to increase the risk of, contribute to, and exacerbate a multitude of developmental, physical, physiological, physiological, cognitive and economic. The exposure of one individual can cause repercussions in multiple generations. Embryos, fetuses, and children are most vulnerable with effects born out over a lifetime, and that of their offspring. Many of these effects only require short-term exposure and some have even been shown to occur at levels below current limits recommended by the World Health Organization. One example of this is that a recent study found that “Even within the limits set by the World Health Organization, the pollutants PM₁₀, SO₂, NO₂, and O₃ are associated with increased risk of treatment for respiratory diseases in children 0 to 6 years of age.” Unfortunately, the US limits are higher than WHO, 300 % higher in the case of PM₁₀!

In fact, in 2019, in the Advice from the Independent Particulate Matter Review Panel (formerly U.S. EPA Clean Air Scientific Advisory Committee Particulate Matter Review Panel) on EPA’s Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter, it stated that the committee unanimously and unequivocally found that the current primary annual and 24-hour PM_{2.5} National Ambient Air Quality Standards (NAAQS) are not adequate to protect public health. The advice from this 20-member committee, whose scientific disciplines include epidemiology, medicine, toxicology, air quality measurement, air quality modeling, exposure assessment measurement and modeling, risk assessment, statistics, and others, was ignored due presumably to political pressure. Not only are the NAAQS too high in some cases, but due to the measure and mechanism by which they work, they can not replace the safety provided by good land use and zoning regulations, that are meant to do things like keep factories with air emissions and hundreds of heavy trucks away from elementary schools. In fact, there is a state law that

prohibits siting a school near a factory. Unfortunately, the reciprocal law does not exist. Clearly, just like with the water resources, we cannot rely on the DEP or the EPA to do the job of what appropriate zoning should do. The whole point of zoning is to keep people safe and provide for their health and welfare. Ordinance #2017-302 puts families and school children directly in harm's way.

The air emissions, threat to the groundwater, and the very presence of the industry that this zoning change will allow for will have a serious negative economic effect on those who live and or work closest to the site in question. Productivity and workforce participation will be negatively affected by the health effects of the air emissions. The local agricultural operations will be negatively affected by the air emissions with lower quantity and quality of crop yield and would be devastated if the ground water aquifer were fouled. The equine operations in the area, of which there are several, will be negatively affected by the air emissions as they affect the horses' health and performance. The mere presence of the industry that will be provided for by this zoning change will cause property values to fall. There will be serious economic consequences for the immediate area around the site in question.

Please also understand that the air here most of the time is stagnant and does not circulate in this valley, there are days that those with asthma and other high risk individuals suffer and have to wear a mask or stay inside. These toxins in the air will only compound that problem. This zoning change will provide for industry that will negatively affect the health safety and welfare of our community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must NOT approve this proposed zoning change. Please vote NO on the ordinance #2017-302.

Let me close in saying I have spent the last 20 years working for FEMA in the Recovery section for Individual assistance, helping disaster victim's deal with loss of their homes, property and loved ones. I am starting to wonder if I was placed here to help my family and neighbors in the coming years from the destruction that will come from heavy industry allowed to be built in such a populated area next to my home.

Gina Biller

4922 Charles Town Rd

304-702-4479

Kearneysville, WV 25430

geesbees2@gmail.com

304-702-4479

Stacey Pfaltzgraff

From: Daniel Blackmore <danielblackmore@mac.com>
Sent: Thursday, June 18, 2020 11:46 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan as quoted above states, "the City will designate ample land that is well-suited for industrial facilities." Due to the hydrogeology, this land is not well-suited for industrial facilities as would be allowed by the Special District Industrial. Respectfully, Mr. Stranko is incorrect in his assertion that the council is not allowed to take the environment into consideration in zoning decisions, as it is the purview of the DEP. In fact, the DEP implores local governments to do just that in its guiding documents on stormwater design in karst. The DEP Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." Clearly, the DEP is encouraging local governments to use zoning to steer development like this away from karst land. This karst area is inappropriate and ill-suited for this use and it should not be zoned for it.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." This zoning change would clearly adversely affect the health, safety, and welfare of the community. The Comprehensive Plan further states, "the City will designate ample land that is well-suited for industrial facilities." This land is clearly ill-suited for industrial use and should not be zoned for it. Therefore, the council should vote no on the zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
Daniel Blackmore
danielblackmore@mac.com
Knoxville 21758

Ranson City Council.

Dear Ranson City Council,

I am writing to encourage the City of Ranson's City Council to adopt the Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)". It is time to move past the false narrative being pushed by destructive environmental radicals who seek to destroy Ranson's progress. The City Council previously made the decision to rezone the property in question and hundreds of millions of dollars have been spent by private and public entities based upon Ranson's governmental act. Failure to adopt the Ordinance will subject Ranson to years of costly and needless litigation (that it will lose), which will force Ranson to cut public services to Ranson's citizens.

Sincerely,

Raymond Bruning

Stacey Pfaltzgraff

From: Dan Casto <dancastocpa@gmail.com>
Sent: Thursday, June 18, 2020 2:48 PM
To: Stacey Pfaltzgraff
Subject: Written Comments to Proposed Ordinance #2017-302

CAUTION: External Email

Dear Ranson City Council,

I am writing to encourage the City of Ranson's City Council to adopt the Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)". It is time to move past the false narrative being pushed by destructive environmental radicals who seek to destroy Ranson's progress. The City Council previously made the decision to rezone the property in question and hundreds of millions of dollars have been spent by private and public entities based upon Ranson's governmental act. Failure to adopt the Ordinance will subject Ranson to years of costly and needless litigation (that it will lose), which will force Ranson to cut public services to Ranson's citizens.

Sincerely,

Dan Casto
Charles Town, WV

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Michael Chalmers <michaelchalmers1@gmail.com>
Sent: Thursday, June 18, 2020 2:45 PM
To: Stacey Pfaltzgraff
Subject: In regards to Rockwool/Ranson

CAUTION: External Email

Hello Stacey: I hope this finds you and yours well.

My comment in regards to Rockwool/Ranson:

The lack of consideration for comprehensive community awareness and involvement for this project, and the secretive nature of its roll-out speaks to what most involved already knew: it likely wasn't going to be well received by the general public, and rightfully so. This area doesn't need heavy industry to sustain itself and/or prosper, so why even open that door to what would undoubtedly be a Pandora's box – as we see everywhere else in the state.

Moreover, we need look no further than to the actions of certain members of the County Commission in the last couple years, and, without a doubt, the relentlessly toxic nature and ridiculous behavior of Rockwool's most vocal advocates – Jefferson County Prosperity – to know that the locals behind this project, and thus the project, simply don't have Jefferson County's best interests in mind. While some supporters may simply be driven by profits, what we've also come to witness is a sinister underbelly within the county of people in relatively meaningful positions saying, promoting, and/or doing some really reprehensible things – and if these are the folks responsible for promoting Rockwool, then what else will they promote the next chance they get?

Simply put, thanks but no thanks. Jefferson County is doing just fine without Rockwool; all it will ever do is add a massive amount of pollution – whether it's acceptable by certain partisan standards or not – where there wasn't any before. And that's the best-case scenario: there are a whole host of other dangers that come with heavy industry – and we don't need any of them here. Especially since we never needed them in the first place!

I appreciate your time. Have a great day.

Mike Chalmers

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Betty Cox <betty.cox201@gmail.com>
Sent: Thursday, June 18, 2020 3:26 PM
To: Stacey Pfaltzgraff
Subject: Request to Ranson Re #2017-302: Vote NO to amend and re-enact official zoning map

CAUTION: External Email

Dear Ms. Faltzgraff,

My husband Philip Paschall and I own a historic house in Harpers Ferry, Jefferson County, WV. We rent it out, typically to folks who appreciate, as we do, the gorgeous scenery and historic nature of the Harpers Ferry area, to say nothing of the house itself. **I am writing to urge Ranson to vote no on ordinance #2017-302.** Jefferson County has many beautiful areas that attract tourists, including Harpers Ferry and Shepherdstown, where visitors can relax and enjoy the rural atmosphere and clean air. Jefferson County needs tourists to support its wonderful small businesses and artisans. Jefferson County also needs to support the well being of its residents and the students and faculty at Shepherdstown University, a pillar of the community.

Unfortunately, this ordinance would allow heavy industry in Ranson that would dramatically and negatively affect the health and well-being of people and nature in Jefferson County, as well as our county's appeal for tourists, small businesses and families, for generations to come.

What is most frightening is the toxic air pollutants that ordinance #2017-302 would allow in Ranson and the surrounding area, including Harpers Ferry and Shepherdstown. Prevailing winds from heavy industry in Ranson at locations such as Jefferson Orchards if this ordinance is approved would blow primarily toward areas such as Shepherdstown and Harpers Ferry. Winds would **not** be dispersed as indicated by information submitted related to Rockwool, because that information was based on Martinsburg area data which has different prevailing winds. Dispersion would not foster clean air, it would spread the toxic air emissions everywhere the wind blows.

Every time I drive on Route 340 from Harpers Ferry, through Bolivar, and on to Charles Town and Ranson, I am awed by the view of historic buildings, Harpers Ferry National Historical Park, mountains, rolling hills and agricultural fields. It sickens me to imagine that, if ordinance #2017-302 passes and Ranson continues to welcome heavy industry to the county, it will be smokestacks instead that dominate that scene, and transform it into one that is more like driving through the industrial zones of Interstate-81. Furthermore, the presence of those smokestacks can and will be used as arguments to add more heavy industry to this precious area.

Voting no on ordinance #2017-302 will help protect water resources throughout Jefferson County. The type of industry that ordinance #2017-302 would allow puts the ground resources of Jefferson county at significant risk due to the karst hydrogeology. The site in Ranson is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams.

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

If this ordinance were passed, Ranson would essentially be dictating the downward trajectory of the rest of our county, including the tourism, agriculture, and home values such as our house in Harpers Ferry, for decades into the future. I again request that you **vote no on ordinance #2017-302**. The long-term economic, environmental, and community health of municipalities like Shepherdstown depend on Ranson's participation in a coordinated zoning plan for **all** of Jefferson County.

Please do not let this happen!

Thank you.

M. Elizabeth Cox, betty.cox201@gmail.com and
Philip D. Paschall, phil.paschall@gmail.com, owners of
167 Public Way, Harpers Ferry, WV 25425

June 17, 2020

Ranson City Council
312 S Mildred St
Ranson, WV 25438

Council Members:

In regard to Proposed Ordinance #2017-302: “AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: ‘JEFFERSON ORCHARDS’ REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)”

We provide the following comments and request that you reject this proposed amendment because in many ways it does not comport with Ranson’s 2012 Comprehensive Plan, hereafter referred to as the “Plan.” We object on the following grounds:

- 1) The Jefferson Orchard property is planned for a new “Northport” MARC station (see Plan, pg 30, item 7: “Jefferson Orchard. A proposed relocation of the Duffields MARC station and development of a Transit Oriented D in an intended growth urban area.”). With the predicted growth and development of the city and the county, that new MARC station is essential and at a highly suitable location, but the proposed amendment would seriously compromise, let’s be real, it will curtail this element.
- 2) The proposed amendment violates the Plan’s “Historic Preservation Objectives” (pg 41) to “Provide for the protection of historic sites and structures in all applicable ordinances and regulations.” And to “Evaluate new development projects and their relationship to historic properties to reduce potential impacts they may cause.” The proposed amendment will severely compromise the historically significant Boyd Carter Cemetery. In the words of Dr. Sacoby Wilson, Associate Professor, Maryland Institute for Applied Environmental Health, University of Maryland-College Park.: “You always know when it’s injustice when you see them tryin’ to tear down or build over a Black cemetery. This is not the 1st community I’ve worked in where a Black cemetery has been a target. I don’t care about your living or your damn dead! That’s what’s happening! Right? That’s environmental racism!” <https://youtu.be/PgbgzHyb0fc?t=47>
- 3) The proposed new uses will eliminate a large tract, approximately 25 acres, of “T1 Natural Zone” green infrastructure planned for the Jefferson Orchard site. In the words of the Vision Section of the Plan, Green infrastructure is one of its Key Goals, stating on Pg. 14, Goal 5, “Green infrastructure supports sustainable communities – Natural systems deliver hard-to-measure but crucial services for neighborhoods. Trees, and other vegetation in natural systems and landscaping, provide stormwater management, shade and animal habitat. Well-designed drainageways move concentrated rainwater away from developed areas and also provide valuable open spaces. Infrastructure investments and development policies should protect, reinforce and build on natural

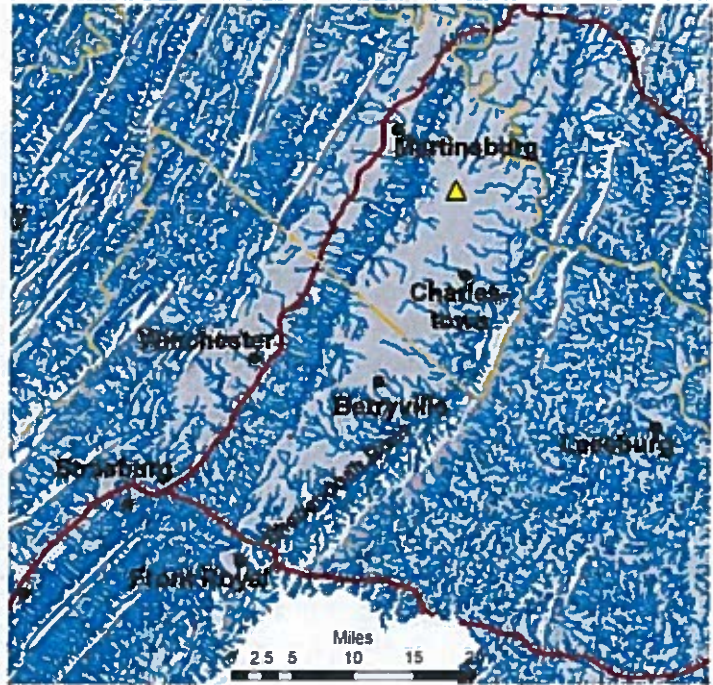
systems." (underlining added by us for emphasis). The loss of the planned green infrastructure would both harm wildlife and any move to medium to heavy industry on that site would seriously threaten the quality of our streams and groundwater.

- 4) The proposed amendment does not comport with the Plan's description, on page 84, that "Charles Town/Ranson's direct relationship with the surrounding agriculture is part of its character and its appeal as a free-standing, independent town." It does not comport with two of the Plan's four stated "Natural Environment Objectives" to "Avoid noxious uses in the annexed area. In this case, a "noxious" use is one which poses a hazard, or which nobody would like to live or have their food grown near..." Certainly, a noxious use would include one that threatens the safety of our children attending nearby schools.
- 5) The proposed amendment violates the Plan's City vision, elaborated on pg 86, Section 4.5.2: "The City's vision is to preserve and protect critical and sensitive environmental areas." In particular, it violates the Plans's "Rivers and Streams Objectives: 1. Protect the health of the local watersheds. 2. Do so in a manner that enhances, rather than detracts from neighborhood environments." This is not an issue of "creating new regulations," a false narrative made by Tim Stranko during the first reading, it is an issue of not creating a situation where Ranson would be risking the health of a large area of the county and one which would negatively impact, not enhance, neighborhood environments.
- 6) The proposed use changes conflict with the many environmental vulnerabilities of the Jefferson Orchard property. Of great concern are potential negative impacts upon our (i.e., Ranson's and Jefferson County's) water, especially ground water. Almost the entire county uses wells as sources of their water, including the major community provider Jefferson Utilities. Over 85% of the county sits on Karst¹, or porous limestone, by which we are blessed with an abundance of groundwater, much of it stored in underground voids. However, we must be very vigilant to protect that water, for if it becomes contaminated it will be almost impossible to remedy, in all probability human health would be compromised, property values would plummet, and the costs of remediation and restoration would be massive.

I, Jim Cummins, am a retired freshwater ecologist (Master of Science, George Washington University, 1985) and during my career I worked on the Potomac River and many of its tributaries, from deeply urban Washington DC to very rural mountain streams. I received national awards and other recognitions for my work. Let me confirm and emphasize that keeping groundwater, streams, and rivers clean is significantly cheaper than having to fix them when they become polluted. Restoring polluted waters, even when technically feasible, often cost many millions of dollars, even billions. Restoring polluted groundwater is especially challenging, often technically infeasible, due to the difficulties in access. In this county most water is deep underground making restoration even more of an obstacle.

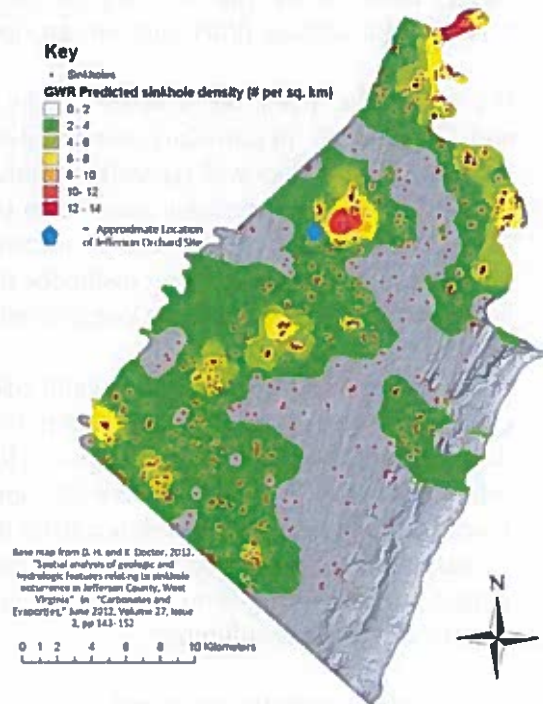
¹ Kozar, M. D., *et al.*, 1990. **Geohydrology, Water Availability, and Water Quality of Jefferson County, West Virginia, with Emphasis on the Carbonate Area.** U.S. Geological Survey, Water-Resources Report 90-4118.

Importantly, Jefferson County has many fewer surface streams compared to other areas in our region, see the adjacent map of the region's surface streams, notice the void. The comparatively low number of streams in our county is because our landscape is instead drained by many cracks and sinkholes, with related caverns and natural underground conduits, all with little or no filtering of what is running into them. Contaminants can go directly and quickly into our groundwater. The Jefferson Orchard property, noted by the yellow triangle on the map, is located in that void of surface streams but also a known headwater area for many of the county streams (Elk Branch, Rattlesnake Run, Rocky Marsh, Shaw Run, and Hopewell Run).



The county's natural network of underground conduits enables the rapid transmission of pollutants over large areas of the landscape. During the Kozar study, cited in the first page, dye was injected into a well near the Jefferson Orchard property (in the Elk Run watershed) and the dye was very quickly found in many of the county's streams, in less than two weeks traveling eight miles away in Rocky Marsh Run. This is proof that pollutants move rapidly underground over a large area of the county irrespective of surface drainage.

Sinkholes and land subsidence in the county can also impact infrastructure such as roads and utility pipelines (sewer, gas, and water). Although hundreds of sinkholes have been identified in Jefferson County, without question many more exist. A 2012 study of Jefferson County's sinkholes determined that the area of and around the Jefferson Orchard site is the most dense area of sinkholes in the county². The map at right is of the sinkhole



² D. H. Doctor and K. Doctor, 2012. "Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia" In "Carbonates and Evaporites," June 2012, Volume 27, Issue 2, pp 143-152

density from that report (we have inserted the approximate location of Jefferson Orchard with a blue symbol). Ranson couldn't have selected a more vulnerable site to propose an upscaling of industrial activity.

Not only are the many sinkholes of concern, but also land subsidence or collapse due to changes in the landscape. Subsidence most often occurs when voids in the limestone which nature and time have plugged with soils (called "covered karst," prevalent in Jefferson County) become saturated or eroded due to changes in stormwater runoff. The runoff water softens the plug, subsiding or collapsing it and any overlaying material. These collapses can cause major holes but, importantly, a subsidence of only a few inches can compromise structures, roads, or break utility lines which is particularly bad for sewer or gas lines.

For instance, in 2008 a very bent Jefferson County Public Service District (JCPSD) sewer trunk line was discovered next to the Norm Thompson warehouse in the Burr Industrial Park, a site very close to the Jefferson Orchard site. At that time, I was on the board of the JCPSD and am well aware of the details of that event. Stormwater runoff from the Norm Thompson building and parking lot had caused the surrounding land to become saturated and heavy with water, resulting in land collapse which stressed and bent that sewer pipe. Fortunately, the JCPSD was able to detect and fix that pipe before it broke and spilled sewage into the groundwater.

A similar land subsidence at the Jefferson Orchard site could be catastrophic for such any large factory and/or sewer lines serving that facility, it could even cause collapse sending industrial waste and/or sewage down into our groundwater.

We emphasize that spills or sewer breaks in Karst landscapes are very different from those in non-Karst areas. In non-Karst areas spills tend to runoff off on the land surface and sewer and other pipeline breaks will typically bubble up quickly to the surface where they can be detected. Spills and leaks in limestone areas are much more problematic because they A) are much less likely to surface, B) thereby can go undetected for a long time, C) can rapidly convey the discharged contaminants long distances from the initial spill or break, further complicating location detection, and D) can contaminate large amounts of groundwater.

It is hard to overstate the public health risks from spills or leaks in Jefferson County because they can rapidly spread contaminants and pathogens underground over a broad landscape dense with drinking water wells. They can cause widespread illnesses which can be fatal, especially to infants, the elderly, and to those with suppressed immune systems. They are emergency response nightmares. If a leak occurred during a public health crisis such as the current Covid-19 pandemic it would likely greatly increase the severity of the problem. Remediation measures at best would be long-term and extremely expensive. Property values over a large area of the county would likely plummet.

The problems with the proposed zoning amendment to the Jefferson Orchard site are real, threatening, and numerous. Proposing to rezone the site to locate medium to large industry at such a sinkhole hotspot is, to be blunt, just plain nuts from the standpoint of pollutants entering our groundwater and the risks to the structural integrity of factory buildings and associated sewer, water and gas lines.

The studies we have cited in this letter are not obscure technical documents but are readily accessible at the Ranson City and Jefferson County websites. They were important studies commissioned by the county for planning purposes. We are baffled that they have apparently been overlooked or ignored in the preparation for this proposed amendment. Due diligence requires that the information in these documents should have been carefully reviewed, considered, and properly cited before any proposed changes to the zoning to the property.

We strongly request, for the health and vitality of both Ranson and Jefferson County, that you vote "No" on the proposed zoning amendment.

We are intimately linked by ground and surface waters.

Your neighbors,

Jim and Nancy Cummins
5 Preston Street
Harpers Ferry (at Bakerton), WV. 25425

304-876-3234

Stacey Pfaltzgraff

From: Lynn Delles <lbdelles@gmail.com>
Sent: Thursday, June 18, 2020 4:45 PM
To: Stacey Pfaltzgraff; Duke Pierson; Gene Taylor; Scott Coulter; Tony Grant; Amanda Stroud; Mike Anderson; Don Haines
Subject: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)
Attachments: Ordinance #2017-302 Written Public Comment.Delles.pdf; Ordinance #2017-302 Public Comment.Appendix.Delles.pdf; Public-Comments-on-WVR108876-and-WVG611896-Wimer-Jefferson-County-Foundation-.pdf; Petition-RE-Industrial-Stormwater-Permit-Application-No.-WVG611896-Wimer.fnl_ (1).pdf; 1-s2.0-S0048969718338543-main 2.pdf

CAUTION: External Email

Dear Ms. Pfaltzgraff,

Please accept this and all attachments and linked documents as written public comment for the above referenced hearing. Please also find attached an appendix file that has figures to accompany the written letter and three supporting documents referenced in the letter. Please also refer to [this link](#) for the exhibits referred to in the Petition to the WVDEP (PDF is attached).

Thank you.

Best regards,

Lynn Delles

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Jefferson County Foundation, Inc.

3546 Old Leetown Pike
Ranson, WV 25438

June 18, 2020

City of Ranson Council Members
312 S. Mildred St.
Ranson, WV 25438

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Dear Mr. Mayor and Council Members:

I respectfully request that you vote no on Ordinance #2017-302. This zoning change will violate the intention of the comprehensive plan of Ranson to provide ample affordable housing in complete communities that will allow residents to live, work, and shop in the same community. Instead, it will promote replacing them with a single-use area that would be a separate pod of land use. This zoning change will also allow land to be used for industry that it is totally inappropriate and ill-suited to, endangering the water resources and water safety. Through its air emissions, effects on local industry, and water quality the industry this zoning will provide for will adversely affect the health, safety and welfare of the community. This zoning change adds no additional advantage to the residents of Ranson and violates the comprehensive plan in several key areas working in contrast to the goals, objectives and actions of the comprehensive plan. This will result in consequences that were intended to be prevented by the comprehensive plan. Please vote NO zoning ordinance #2017-302.

1.0 Community Planning

In chapter 3 of the 2012 comprehensive plan of Ranson, the Private Realm the introduction states: "Today, the vision for the land in the Urban Growth Boundary is multiple neighborhoods using distinctive names to create their own identity and preserve the small-town atmosphere. Each of these neighborhoods should have its own commercial center to support their local needs and reduce trip generation." (page 27, 2012 comprehensive plan) In this section and throughout the document, the comprehensive plan continues to reiterate that complete communities and neighborhoods are the goal and that large tracts of land dedicated to a sole type of use that do not allow integration into the community is not in alignment with the plan. This zoning change

PO Box 460, Ranson, WV 25438
Jefferson County Foundation, Inc. is a 501(c)3 Non-Profit organization.

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

would literally eliminate a complete community, and replace it with a large tract of land for a sole use. Further, this sole use is inappropriate to be integrated into a community, so it would become a pod of separate land-use.

The first Private Realm objective in chapter 3 is listed as “1. Maintain the historic mix of housing with businesses. Mixed use should be the norm throughout neighborhoods, districts, and corridors. **Single-use areas should be the exception.** Every place within each neighborhood should have a **variety of compatible uses and building types.**” (page 27, 2012 comprehensive plan) Figure 2.3 the sector map of the 2012 comprehensive plan is underlain by the following passage: “The Sector Plan is the primary planning tool in the Urban Growth Boundary for guiding future growth. Instead of planning for **Pods of separate land uses**, the Sector Plan plans for **complete Communities** – compact, pedestrian-oriented, mixed use neighborhoods as well as identifying areas to remain suburban for the near term.” In section 3.1 Land Use in the general introduction, it states: “Neighborhoods, districts and corridors are the essential elements of development and redevelopment in the City. They form identifiable areas that encourage citizens to take responsibility for their maintenance and evolution.” (page 29, 2012 comprehensive plan) Under section 3.1.2 preferred development, it states: “Community types include: historic preservation of the existing Old Town neighborhoods; redevelopment and renewal of existing neighborhoods, and **new complete neighborhoods** as the preferred development pattern for expansion.” (page 34, 2012 comprehensive plan) It is made abundantly clear throughout the Private Realm section and particularly the Land Use section of the 2012 Comprehensive Plan that the focus and goal of the comprehensive plan is to develop new complete communities as growth is expanded into the undeveloped urban growth boundary.

It is also clear that Jefferson Orchard including the land in question is within the urban growth boundary and slated for this type of development. In section 3.1 Land Use of the 2012 Ranson Comprehensive Plan, under General, it states: “The undeveloped land within the Urban Growth Boundary is planned for **complete communities** that support the economy and quality of life of Old Town Ranson.” (page 29, 2012 comprehensive plan) According to figure 2.3, the sector map on page 21 of the 2012 Ranson Comprehensive Plan, the land under consideration for this zoning change is in the G3 Preferred Growth designation along with the remainder of Jefferson Orchard (Exhibit x). Table 2.1 on page 20 of the comprehensive plan defines G3 Preferred Growth as intended for Preferred Expansion. (Exhibit x) Therefore, the land being considered for this zoning change and all of Jefferson Orchards is undeveloped land within the Urban Growth Boundary that is, according to the 2012 comprehensive plan, preferred for development and as such, again according to the plan, it should be planned for a **complete community** as directed in section 3.1 as quoted above. The 2012 zoning plan for the development of Jefferson Orchards **provided for complete communities** that supplied much needed affordable housing, parks schools and community centers within walking distance for residents, and neighborhoods where residents could live, work and shop. In contrast, this proposed zoning change reduces the production of affordable housing, eliminates a planned complete community, and due to the current land owner’s insistence that the adjacent development be limited, **would lead to a single-use area or pod of separate land-use.**

2.0 Housing

Ranson has a history — even before incorporation — of having affordable housing and throughout the 2012 Comprehensive Plan, affordable housing is clearly a priority. There are many locations where this priority is highlighted, a few of them are highlighted here. In section 3.1, under General Land Use Actions number 1, Revise the Zoning Ordinance via the Smart Code section “c” states: “Encourage a variety of building types – particularly for affordable housing.” Number 5 of this same section states: “Support affordable low-cost housing.” On page 37 under section 3.2 housing, it states: “Since the Department of Housing and Urban Development has established that a household should spend no more than 30% of its annual income on housing, affordable housing solutions is paramount to Ranson’s future.” (page 37, 2012 comprehensive plan) On page 37 still under housing, it states: “Through the Federal grants and the planning that has resulted, the City is poised to replace outdated, use-segregating ordinances with those that can enable affordable solutions.” (page 38, 2012 comprehensive plan) On page 39 under section “f” of housing actions, it states: “When selecting sites for affordable housing, consider proximity to workplaces. For many people, transportation is second only to housing in cost. Public transportation and sheer proximity to work, shopping, and amenities can reduce transportation costs – and make the combination of transportation and housing more affordable.” (page 39, 2012 comprehensive plan) It is obvious that the intention of the comprehensive plan is to provide for the development of affordable housing.

Further, it is clear as discussed in the above section that the plan intends this affordable housing to be in complete communities where common facilities (i.e. parks, schools, community centers) are provided and residents can live work and shop in the same community. In section 3.1.1 Community Design under Community Design Action number 3.a., it states: “Do not allow concentrations of poverty to develop.” Similar statements are made on page 32, 44, 101, and 114 of the comprehensive plan. This it is also clear that the comprehensive plan does want this affordable housing to be concentrated in less desirable areas that become concentrations of poverty. Complete communities solve this by planning an appropriate mix of housing where the “overall standard should be raised to that usually demanded by business people.” (page 39 of the Comprehensive Plan section 1.e. of Housing Actions) This allows individuals and families of all incomes to live and enjoy the same neighborhoods with less need for travel and more healthy communities.

The current zoning change would remove hundreds of housing units further limiting the affordable housing that Ranson can provide. One entire complete community will be removed and replaced by expanding a single use tract of land that contains no housing. The entity that currently plans to utilize this zoning change will make this area so undesirable that those who can afford to live elsewhere will not plan to live in a new community near this facility. Further, in those communities that currently surround the site being considered for rezoning, the great majority of those who can afford to leave the area will. This will further depress this already relatively and historically lower income underserved area. If the remainder of Jefferson Orchards is developed into a new community, only those who cannot effectively find housing in more desirable locations will move here. This will effectively create a “concentration of poverty,” to develop in the area surrounding this zoning change.

The entity currently planning to utilize this zoning change has attempted to limit further development in the remainder of Jefferson Orchards effectively steering it away from new community development. This would further reduce affordable housing development, create a pod of separate land use, and increase trip generation. All of these are listed as things that should be disallowed by further development.

3.0 Environmental Objectives

The comprehensive plan clearly intends for environmental concerns to be taken into account and specifically addresses this in multiple sections of the plan. The clear objective of the plan is to protect the environment from degradation and allow residents from noxious entities by designating land for appropriate uses through appropriate zoning.

3.1 Respect Adjacent Natural and Other Open Areas

Under section 3.1.3 Redevelopment and Renewal Objectives, it states: “1. Ensure that redevelopment respects adjacent natural and other open areas. Redevelopment abutting open areas should meet them sensitively, both in terms of appearance and in environmental terms.” (page 35, 2012 comprehensive plan) The area to be rezoned abuts open natural areas that are in the county. The proposed zoning change would provide for industry that would be sensitive in neither the appearance nor environmental terms. The entity currently planning to utilize the zoning change will have air emissions that include large amounts of PM10. The entity’s own air modeling reveals that a majority of this will fall to the ground in the immediate vicinity, adversely affecting the abutting open areas. This zoning change would violate this objective of the comprehensive plan.

3.2 Avoid Noxious Uses

In Chapter 4 section 4.5 Natural Environment, subsection Natural Environment Objectives, number two states: “Avoid noxious uses in the annexed area. In this case, a ‘noxious’ use is one which poses a hazard, or which nobody would like to live or have their food grown near...” (page 84, Chapter 4, section 5, Natural Environment subsection, Natural Environment Objective, number 2.). This zoning change will achieve exactly the opposite; it will provide for a very noxious use that nobody would like to live near or have their food grown near. In fact, the entity that plans to utilize this zoning change itself has said on many occasions, both publically and privately, that they do not wish to be sited next to residential areas and it is their stated company policy not to build plants close to residential areas. This zoning change would provide for industry that would produce large amounts of particulate, gaseous, and hazardous air emissions, create noise pollution, light pollution, and seriously threaten the groundwater. Uses deemed noxious “include uses such as: a. Meatpacking and slaughterhouses, b. Incineration, and c. Landfills.” The issue with these examples is exactly the same as the issues with the entity that is planning to utilize the zoning change: sights, smells, sounds, air pollution, and groundwater contamination. These attributes clearly adversely affect the health, safety, and welfare of the community and therefore cause people to not want to live near or have their food grown near these entities. This zoning change would clearly violate this section objective of the 2012 comprehensive plan.

It goes on to say under the Natural Environment Actions, number 3 shall be to “amend the Zoning Ordinance and the Subdivision Ordinance via the SmartCode to prohibit noxious uses within land annexed into the Urban Growth Boundary. To the extent possible, work with Jefferson County and the State to eliminate noxious uses from land that may be annexed by Ranson.” Action number 4 states: “Develop design guidelines for the land in the Urban Growth Boundary, based on both sound urban design principles and upon ecological and agricultural principles. For example, guidelines may cover which land to develop to what level, sightlines, and surveys of karst geology. These may become regulatory or advisory.” This demonstrates it is the expectation of the comprehensive plan that zoning will be used to not just deter but “prohibit” noxious uses within land annexed into the Urban Growth Boundary exactly like Jefferson Orchards. This zoning would violate these prescribed actions in the comprehensive plan and literally achieve exactly what the comprehensive plan is attempting to avoid.

3.3 Protecting Karst Areas and Water Resources

In chapter 4, section 4.5.1, Geology and Hydrology, on page 85, the comprehensive plan states in full the following:

“Ranson sits on Shenandoah carbonate bedrock with solution channels. These channels are the primary way precipitation gets into the water table. Percolation through the carbonate rock dissolves the rock and enlarges minute fractures. This has produced a karst geology, with caves, sinkholes, springs, ‘losing’ streams, and underground streams. Sinkholes are formed when the carbonate rock below the surface is eroded by water, and the surface collapses into a depression. These sinkholes provide an avenue for groundwater recharge. However, they can also sluice stormwater runoff or hazardous materials into the aquifer. Within the Urban Growth Boundary, the groundwater is as little as 25 feet below the surface.

Geology and Hydrology Objectives

1. Buffer any hazardous materials and proposed development and direct stormwater runoff, treated or untreated, from sinkholes. This may require a distance buffer. It may also require an engineered solution – depending on the geology and hydrology.

Geology and Hydrology Actions

1. Require adequate planning during the development of land. Given the nature of the karst geology, not to mention that of rivulets leading to streams, a one-size-fits-all approach should be avoided, in favor of sound engineering.”

This reveals an expectation from the comprehensive plan to consider the suitability of land based on its karst hydrogeology. Karst hydrogeology as explained above has high aquifer vulnerability leading to a high risk of groundwater contamination depending on the surface land use. In fact, a simple search of the peer reviewed scientific literature reveals that policy makers have been using “Aquifer Vulnerability”, to set land use and water resource protection policy for decades.¹

The guiding documents of the WVDEP recognize that industrial uses are not appropriate for these locations. In the guiding document supplied by the WVDEP *Stormwater Management Design in Karst Areas*, it states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”² This demonstrates an obvious desire by the WVDEP for local governments to take on the responsibility of limiting environmental impact through appropriate land use regulations and zoning. It is also clear the 2012 comprehensive plan intended to provide these protections.

The Chesapeake Bay Stormwater Network karst stormwater guidance document, the *CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed*³, which the WVDEP cites in its own guiding document, *Stormwater Management Design in Karst Areas*, clearly agrees stating:

“First, the effect of land development on karst terrain is complex and hard to predict, and requires professional analysis to reduce the risk of geological hazards, damage to infrastructure and groundwater contamination.”

“The working group acknowledges that past approaches to stormwater and land development in karst terrain have been inadequate to safeguard the public and the environment.”

“...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”

We clearly need stronger comprehensive land use plans and zoning that direct new growth away from karst areas to more appropriate locations. Ordinance #2017-302 is literally the opposite of this.

This particular site of Jefferson County has mature karst hydrogeology with very high sinkhole development vulnerability⁴. The maps in Figure 1 show that the entire area in question is underlain by Conococheague or Stonehenge limestone commonly found in areas of advanced karst. In such landscapes, water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways (Figure 2).

Karst aquifers are known to be “extremely vulnerable to pollution,” due to direct connection between the surface and underlying high permeability aquifers.⁵ The site is on an upland area with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. This water is easily contaminated because of diffuse infiltration of surface water into the groundwater through the porous bedrock and point infiltration through sinkholes (Figure 3). The springs at the margins of the upland area are directly affected by the water quality throughout the aquifer (Figure 4).

The groundwater at this site is 60 feet or less below the ground⁶, and it is known from dye studies that this water moves through the ground and back to the surface relatively quickly. In a dye test, the USGS found that the water from just adjacent to this site emerged in the headwaters

of both the Elk's Run and Rattlesnake Run⁷ (Figure 5). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figure 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figure 6). One of the six springs that feeds the town run in Shepherdstown runs right through the middle of town where children play and learn to fish. The headwaters of Rattlesnake Run are a spring about 3.5 miles from the site and which is also a tributary of the Potomac River. These are just three of the examples the dye test demonstrated of how the groundwater at the site communicates with and affects the surface waters in the county. This site is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams.

Karst hydrogeology has very high "aquifer vulnerability" due to the diffuse and point infiltration⁸. Karst is known to have "severe ground instability problems"⁹. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater through point infiltration. As shown in Figure 2 sinkholes may develop quickly and the ground surface may show no signs of a sinkhole prior to collapse. The particular site is located in the area with the largest sinkhole density in Jefferson County (Figure 7).¹⁰

A study demonstrated that in this area, several factors increased the rate of sinkhole development, including presence of surface water and development. Therefore, the large weighty buildings, drastic changes in ground contour, and centralized stormwater management that is typically required by heavy industry will actually make the karst situation worse, causing karst features to develop and progress more quickly. This was exemplified by the current construction project, where 19 sinkholes developed thus far during construction. In the current owner's own geotechnical investigation report prepared for Thrasher Engineering by Specialized Engineering, it states the following:

"Some sinkholes failures can be induced by construction activities and are of significance because the sinkholes can directly affect the site being developed, either immediately or some years later. Construction activities that can trigger sinkholes include 1) diversion or impoundment of drainage or dewatering activities, 2) removal of overburden cover, 3) shock vibrations, such as blasting, and 4) increased loading.

Prediction of sinkhole location or occurrence is difficult, if not impossible, and there is always a significant degree of uncertainty associated with the occurrence of future sinkholes. Structures built within the area of influence of a sinkhole can also be affected by sinkhole collapse or subsidence.

By virtue of the underlying geologic formation, the Owner must acknowledge there is an inherent risk of potential ground subsidence or collapse associated with construction of structures in karst terrain. All sites in karst terrain have the potential for sinkhole formation."¹¹

Even a firm employed by industry recognizes the negative effects of development in karst and the dangers it imposes. The entity that is currently planning on utilizing the zoning change has taken every opportunity to use the minimum requirements and least expensive routes with little described understanding of or regard for our environment (please see attached written public comment and citizens petition to the DEP) This also demonstrates that we cannot trust industry entities to “do the right thing”. This is why appropriate zoning is so necessary. We can’t trust business to do what government should.

The Chesapeake Bay karst stormwater guidance document¹², which WVDEP cites in the *Stormwater Management Design in Karst Areas*¹³, clearly states “the working group notes that while communities that incorporate this guidance into their development review process can reduce the incidence of infrastructure damage and groundwater contamination, there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations”. These policies recognize some types of land use can increase the amount of surface contamination and that in combination with high aquifer vulnerability the likely hood of ground water contamination is much greater. This is why industry in such locations is so inappropriate.

The comprehensive plan is clear that the risk of hydrogeology should be taken into account when determining land use. The business entities cannot be expected to do the job of good zoning and land use regulations. The WVDEP does not have the power to do the job of good zoning and land use regulations. Therefore, the council cannot abdicate the duty of maintaining appropriate zoning that will protect the community and groundwater from inappropriate uses of land with karst hydrogeology and high aquifer vulnerability.

4. Land Use Objectives

Under land use objectives number ten states the following:

“10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community.”

Manufacturing and assembly-line facilities could have located in Ranson in this area as it is currently zoned. Additionally, with current zoning such entities would help Ranson achieve the remaining goals, objectives, and actions laid out in the comprehensive plan addressed above herein. Therefore, no zoning change is needed to accommodate manufacturing and assembly-line facilities. The proposed zoning change, however, is required to allow the particular manufacturing entity that is planning to utilize it and the desires of the current landowner. Unfortunately, this zoning change will also violate the entire second half of Land Use Objective number 10 as quoted above, and all of the goals, objectives, and actions of the 2012 comprehensive plan as discussed above.

4.1 Land Suitability

The land that is subject to this proposed zoning change is not just ill suited to this proposed use but completely inappropriate. The karst hydrogeology as detailed above makes this land totally ill-suited to this type of industry. The location is inappropriate as it is close to schools and neighborhoods. The entity that currently plans to utilize this zoning change will through its stormwater handling and air emissions pose great risk to the ground water and surrounding people and industry (see attached public comment to DEP, and Petition to DEP, and section 4.2 herein). By allowing this land to be used by this type of industry this zoning change would violate this section of the 2012 comprehensive plan of Ranson.

4.2 Adversely Affect Human Health

In the comprehensive plan of 2012 in Land Use Objective number ten states: the City “will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community.” In fact, the industry this zoning change will allow will be detrimental to the physical and mental health of humans living, working, going to school and even visiting the area. There will be downstream effects on personal and community economic, social and societal metrics. This zoning change would violate this land use objective.

Air pollution created by the industry this zoning change would provide for consists of both gaseous and particulate-matter pollutants. The gaseous includes nitrogen dioxide (NO₂), ozone (O₃ emitted as VOC and NO_x that interact to release O₃), and sulfur dioxide (SO₂). Particulate matter includes particulate matter of varying diameter, and classified by cutoff points — less than 10 μm (PM₁₀), less than 2.5 μm (PM_{2.5}), and that of more recent focus less than 0.1 μm (PM_{0.1}). Because of their small size, these particles can be inhaled deeply into the lungs and deposited in the alveoli. This particulate matter is a complex mixture of many things including metals, elemental and organic carbon. The PM_{0.1} have a higher carbon content, larger combined surface area (increasing contact area), and greater potential for carrying toxic compounds. While not usually measured, the other air contaminants referred to as hazardous pollutants are also very important as they contain among other things neurotoxins and carcinogens.¹⁴ Key drivers of the air pollutants are mining, smelting, and petroleum combustion. These are all processes undertaken or supported by the industry provided for by this rezoning.

Humans are exposed to air pollution through inhalation, ingestion, and contact with skin and mucus membranes. Children are especially vulnerable to the latter two since they are more likely to play on the ground outdoors and more likely to put things in their mouths. Air pollution is the most significant cause of pollution related disease (6.4 million deaths/year).¹⁵ This pollution increases the risk of multiple non-communicable diseases in children including asthma, low birth weight, cancer, birth defects, obesity, diabetes, cardiovascular disease, mental health problems and neurodevelopmental disorders, and increases the risk of chronic obstructive pulmonary disease, cardiovascular disease, stroke and cancer across the lifespan of a person exposed as a child.¹⁶ In fact in 2015 pollution was responsible for 21% of deaths from all cardiovascular disease, 51% of deaths due to chronic obstructive pulmonary disease (COPD), and 43% of deaths due to lung cancer.¹⁷

According to the National academy of science, Children are inherently more sensitive to the effects of air pollution for four distinct reasons.¹⁸

1. Children breathe more air on a per pound basis each day, thus increasing their exposure.
2. The pathways by which mammals detoxify and excrete toxic substances are not fully mature in children and thus less efficient.
3. There are periods in early development with exquisitely delicate developmental processes that are exceedingly sensitive to disruption, and exposure to even low doses of pollutants during this time can increase risk of disease in childhood and across one's lifespan.
4. Exposure in childhood leaves more years of life for diseases to develop that require longer times to develop (long latency period diseases).

Exposure to air pollution in early human development, especially exposure to fine particulate pollution, can be extremely deleterious to children's health and development.

4.2.1 Adverse In Utero Developmental Effects

Cells that make up the embryo and fetus (germ and fetal cells) divide and replicate rapidly and therefore are more sensitive to outside pressures from exposure to foreign substances and disruptions in cellular communications.¹⁹ When polluted air is inhaled some components may cross the blood-air barrier of the lungs into the circulation. The circulation carries them to the placenta. Some of these pollutants cross the placental barrier, affecting the embryo and depositing in the fetus creating permanent fetal abnormalities.²⁰ This leads to impaired organ development, disturbed development of the immune system, premature birth, lower birth weight, and increased infant mortality.²¹ These early changes lead to long-term effects including increased disease development in multiple organ systems throughout life, cognitive defects, achievement deficits, and negative psychological social and economic effects.²² Fetuses may also be affected by the socioeconomic status and life choices of their families both of which have been shown to be affected by air pollution their family members were exposed to (see below). Even worse there seems to be a generational effect, with offspring being affected by the air pollution to which their grandmothers were exposed.²³

4.2.2 Adverse Neurodevelopmental Effects

The central nervous system is increasingly recognized as being affected by air pollution. When particulate matter is inhaled, it may cross the blood-air barrier of the lungs into circulation. The circulation carries it to the brain where it has neurodegenerative effects or the placenta where it creates fetal abnormalities.²⁴ Effects on both the brain and fetus are certainly also effected by air pollution through secondary pathways.²⁵ Gestational exposure to air pollution and especially ultrafine particulate matter affect both embryonic neurodevelopment and brain growth and maturation in early life. Gestational exposure increases the risk of early cognitive deficits, low birth weight, prematurity, and neurodevelopmental disorders²⁶. An association between autism and prenatal exposure to particulate matter in air pollution has been suggested by several case-control studies.²⁷ A 2019 Study²⁸ looked at a

national sample of US children, evaluated the relationship between exposure to air pollution and cognitive outcomes. It found that annual and cumulative measures of air pollution during third grade were significantly associated with lower math test scores. This was likely attributable to exacerbation of asthma symptoms, other decreased health parameters, increased fatigue, or a direct neurodegenerative effect. Two earlier studies found similar outcomes for math and reading/English/language in elementary students exposed to elevated air pollutants including particulate matter, ozone, and nitrogen dioxide.²⁹ Air pollution has also been linked to several parameters with indirect effect on achievement and cognitive ability including school absences³⁰. Ample evidence for other structural and functional changes in the neurological system and neurodevelopmental progression exists in small studies, and animal models. As further studies are conducted, the impact of air pollution on these areas will be shown to be more devastating.

4.2.3 Adverse Respiratory Effects

The human respiratory system develops in utero, through adolescence, and does not actually stop until late teens early twenties depending on sex. The first 6 years of life represent the most extensive period of growth and account for 80% of development. This time period is therefore the most sensitive both because the lungs are developing rapidly and because they are not developed yet so the airways are narrower and there are fewer alveoli.³¹ Exposure to air pollution during the first 6 years of life can damage the lung tissue, impair lung growth, and alter the development of immune function and repair mechanisms within the lungs.³² These effects increase both short and long-term risk for asthma, chronic obstructive pulmonary disease (COPD), lung cancer, and respiratory infections.

Air pollution increases the rate of asthma development in both children and adults. Particulate matter, ozone, and sulfur dioxide contribute to allergic inflammation and pulmonary immune dysfunction in animal models, both strong contributors to asthma³³. Change in lung function is also seen with both short and long term exposure to air pollution in both children and adults. Air pollution not only causes increased risk of asthma, but even short term exposure causes asthma symptom exacerbation, significantly increasing the hospitalization, reduced lung function and increased airway responsiveness in asthmatic children.³⁴ A 2019 study found “Even within the limits set by the World Health Organization, the pollutants PM10, SO₂, NO₂, and O₃ are associated with increased risk of treatment for respiratory diseases in children 0 to 6 years of age”. It is important to note that the US limits are set higher than the WHO, 300 % higher in the case of PM10!

While the development of COPD is most often associated with smoking, outdoor air pollution exposure increases the incidence or cases of COPD. Short term increases of PM10 and other air pollutants can cause existing cases of COPD to get worse, increasing the risk of acute exacerbation, hospitalization, and death from COPD symptoms in patients that already suffer from COPD.³⁵

Smoking is considered the largest cause of lung cancer, however the International Agency for Research on Cancer designated outdoor air pollution and PM as a Class I human carcinogen³⁶. Numerous studies have shown that increased exposure to PM_{2.5}, SO₂, NO₂, and diesel exhaust cause an increased incidence or risk for multiple types of lung cancer.³⁷

While not as extensively studied, it is clear from the studies that do exist that children, the elderly and those with pre-existing conditions are made more susceptible to developing exacerbated respiratory infection symptoms and increased need for emergency intervention when exposed to air pollution.³⁸

4.2.4 Adverse Immune Effects and Autoimmune Consequences

Immune development starts in utero and continues through the first several years of life; disruption in this process can cause autoimmune diseases. Autoimmune diseases are on the rise in developed countries. Studies have shown that oxidant air pollutants, ozone and nitrogen dioxide were associated with an increased risk of incident asthma and eczema in children.³⁹ Both of these diseases are autoimmune diseases and represent inappropriate immune tolerance development. Furthermore, a review of 36 experimental studies revealed that particulate matter, diesel exhaust particles and ozone fundamentally changed cytokine (cell communication tool or molecule) production and cell functions inducing airway hyperresponsiveness and increasing susceptibility to infection and allergies.⁴⁰ Therefore air pollution contributes to and increases the rate of autoimmune diseases affecting several body systems and increases susceptibility to further morbidity (disease). This is one of the reasons the 1918 flu hit Pittsburg so hard. The appropriate cellular communication and immune response had been disrupted by chronic air pollution exposure leaving people's lungs ill-equipped to deal with the virus. In fact, the hypersensitivity likely made the situation worse.

4.2.5 Adverse Effects on other body systems

Air pollution has deleterious effects on several other organ systems including cardiovascular, endocrine, blood and overall health parameters like weight. Studies have shown increased risk of obesity linked with exposure to air pollution.⁴¹ Many studies have also demonstrated the association of air pollution with increased risk for insulin resistance and diabetes, high blood pressure, high cholesterol, stroke, and other cardiovascular and cardiometabolic diseases.⁴² An elevated level of anemia is seen in children exposed to elevated air pollution.⁴³

4.2.6 Adverse Psychological Effects

A review of 178 published articles systematically examined the psychological (affective, cognitive, behavioral), economic, and social effects of air pollution found: "Affectively, air pollution decreases happiness and life satisfaction, and increases annoyance, anxiety, mental disorders, self-harm, and suicide. Cognitively, it impairs cognitive functioning and decision making. Behaviorally, air pollution triggers avoidance behavior, defensive expenditure, and migration as coping strategies. Economically, it hurts work productivity and stock markets. Socially, it exacerbates criminal activities and worsens perception of the government. Importantly, both actual and perceived air pollution levels matter."⁴⁴

4.2.7 Adverse Economic Effect Secondary to Human Health Effects

These health risks would endanger two of our most valuable resources: our people and our future. Labor is essential to the economy. Through negative health effects, air pollution has been demonstrated to have a negative effect on labor supply, productivity and economic growth.⁴⁵ A 2012 study demonstrated a significant direct effect of air pollution on agricultural worker productivity; with a 10-ppb change leading to a 5.5 % drop in worker productivity.⁴⁶ The study found this conclusion could be applicable to all outdoor workers. Because of our agricultural, equine, and tourism industries, Jefferson County has a huge outdoor workforce. Effect of labor supply and productivity are not limited to outdoor workers and or physical labor.⁴⁷ As children struggle during their education with attendance, attention, and socialistic ability due to the effects of air pollution on their health, their achievement suffers. As achievement suffers they are less able to achieve the training needed to achieve a good, well-paying job. Their lifetime earnings and overall wealth will suffer. They will consequently own less property and pay less taxes of all types. The effects of air pollution on human health will lead to decreased economic activity and government income, thereby depressed the local economy. Environmental protection should be seen as an investment in economic growth through advancement of quality labor availability capability and increased productivity.

4.2.8 Inappropriate to rely on the NAAQS alone to protect communities

The City of Ranson cannot simply rely on the EPA regulations to keep children and families in nearby schools and communities safe from the effects of air pollution. In fact, in 2019 the Independent Particulate Matter Review Panel (formerly U.S. EPA Clean Air Scientific Advisory Committee Particulate Matter Review Panel) on EPA's Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter stated that the committee unanimously and unequivocally found that the current primary annual and 24-hour PM2.5 National Ambient Air Quality Standards (NAAQS) were not adequate to protect public health. The advice from this 20-member committee, whose scientific disciplines include epidemiology, medicine, toxicology, air quality measurement, air quality modeling, exposure assessment measurement and modeling, risk assessment, statistics, and others, was ignored due presumably to political pressure. Not only are the NAAQS too high in some cases but due to the measure and mechanism by which they work they cannot replace the safety provided by good land use and zoning regulations, that are intended to do things like keep factories with air emissions and hundreds of heavy trucks away from elementary schools. In fact, there is a state law that prohibits siting a school near a factory. Unfortunately, the reciprocal law does not exist. Clearly just like with the water resources we cannot rely on the DEP or the EPA to do the job of what appropriate zoning should do. The whole point of zoning is to keep people safe and provide for their health and welfare. Ordinance #2017-302 puts families and school children directly in harm's way.

An editorial in the *New England Journal of Medicine*, commenting on several recent studies, stated: "The best control strategy from the standpoint of human health, supported by the scientific evidence to date, is to reduce the levels of all types of air pollutants. Our children's health depends on it."⁴⁸ The *Lancet* Commission on Pollution and Health citing many sources⁴⁹ found that prevention of non-communicable diseases will require pollution prevention and that this will require fundamental changes in societal patterns of production, consumption, and transportation. This will require a paradigm shift to a more sustainable economic model based on

recognition of human rights, especially the right of children to health and well-being.⁵⁰ This is a major unexploited opportunity in in society that many communities are grappling with undertaking. This rezoning would represent a major step in the wrong direction in this respect. There is substantial and overwhelming evidence that this zoning change would violate the Land Use Objective number 10 of the 2012 comprehensive plan of Ranson by adversely affecting the health of the community.

4.3 Adversely affect the welfare of the community

Tourism, agriculture, and the equine industry are the largest industries in Jefferson County and have all played an important role in our economy for hundreds of years.

Jefferson County has always recognized and supported these key industries and, as a result, we have always had what the remainder of the country is now striving to achieve: a local economy based on productive, sustainable business. Across the country, considerable effort is now being expended to promote and support these types of industries, as their exponential benefit to the local and regional economies is only now being fully realized. Heavy industry in the heart of Jefferson county will have detrimental effects on these traditional, sustainable industries. It simply does not make sense to allow the degradation of industries widely recognized to be foundational elements of an adaptable, enduring economy by inviting into Jefferson County the culprit of this degradation and a symbol of a bygone era: heavy industry.

Heavy industry as a goal for job creation is a solution of the past. We are more than 100 years beyond the days of J.P. Morgan, Carnegie, and Rockefeller. The acknowledgement of this shift is clearly expressed in Ranson's Comprehensive Plan which states, "the end of Ranson's traditional industrial period was signaled by the closure of AB&C Corporation, Dixie Narco and the Kidde Foundry (Badger Powhatan)." This statement demonstrates that heavy industry is no longer desired in Ranson. The current Comprehensive Plan prioritizes open space, local agriculture, and quality of life. The plan further outlines how industries like tourism, agriculture, and equine industries are essential to ongoing economic development in Ranson. Heavy industry has numerous negative effects on these industries and it is incompatible with the goals we are striving towards. Heavy industry should not be provided for in Jefferson County zoning regulations.

The tourism, agriculture, and equine industries are synergistic. They support, protect, and promote one another in ways that create long-term stability and profitability in our local economy. Through pasture and crop land, the equine and agricultural industries enable profitable maintenance of the bucolic landscape that draws tourists to Jefferson County. The equine industry provides evening entertainment for tourists while the agriculture industry provides local products increasingly sought after by tourists. The tourism industry, in turn, provides customers and markets to both the equine and agricultural industries. But it is so much more than that. There are countless examples of deep interdependences and symbioses. The equine industry brings outside money into our economy in the form of out-of-state owners and breeders, creating jobs for Jefferson County's equine industry. The attractive nature of the county, as well as the quality and accessibility of accommodations, makes Jefferson County an even more desirable location for out-of-state equine investors. In many ways like this, the equine, agricultural, and

tourism industries work hand in glove to bring money into our states, create jobs, and grow our local economy.

The tourism, agriculture, and equine industries are large conglomerates of small businesses. This structure provides a multitude of economic benefits over an economy based on a small number of large businesses, as is commonly the case in heavy industry. Professor of Agricultural and Regional Economics at Penn State and Director of the Northeast Regional Center for Rural Development, Dr. Stephan Goetz, was quoted in a recent article⁵¹ saying, "Small, locally owned businesses and startups tend to generate higher incomes for people in a community than big, non-local firms, which can actually depress local economies." Small businesses create jobs, cultivate innovation, and provide opportunities for individuals that would otherwise not exist, while large businesses' concentration on efficiency and increasing profitability decreases job count and stifles innovation and individuality. Goetz went on to say "We can't look outside of the community for our economic salvation. The best strategy is to help people start new businesses and firms locally and help them grow and be successful." This concept was supported by a recent WVU study⁵² on the economic outlook for the Eastern Panhandle in which they found that Jefferson County's per capita income was \$8,800 per year above that of Berkeley county. This difference was attributed in part to Berkeley County's job growth over the last several years coming from large companies such as P&G and Macy's, whereas Jefferson County's came from commuters and local small business. These local agriculture, tourism, and equine industries set our community apart. They support small businesses and startups and, in doing so, encourage the growth of better-paying jobs that are so valuable to our local economy.

Local economies that welcome and support small businesses are flexible and agile in times of crisis.⁵³ Small businesses have been shown to be capable of reacting to severe, sudden changes like medical epidemics. Recent events have shown us just how important that is. On the other hand, turbulence and uncertainty have been shown to be the leading causes for failure in manufacturing businesses such as heavy industry.⁵⁴ In these businesses, a concentration on efficiency and lean operations has led to an inability to adapt to change.^{55 56} Agility and flexibility are as important now as they have ever been. Heavy industry will introduce rigidity and threaten the small businesses that provide agility and flexibility to our economy.

Local food production provides a safety net in times of food instability. Recent events have revealed how the drive for lean efficiency and profitability in our food supply chains has left communities vulnerable to food shortages. The current situation highlights the value of the local, sustainable food production that we are fortunate to already enjoy here in Jefferson County as a result of our local agriculture industry. As mentioned above, the equine and tourism industries support the maintenance of the agricultural land needed for this food production. As a community, we should always be moving toward resiliency and agility in our economy and food supply not away from it.

Large companies involved in heavy industry not only hurt our economy directly but also harm industries that have been pillars of our economy for hundreds of years. Check out how heavy industry in this area of Jefferson County will damage each of these industries in the other fact sheets of this series.

4.3.1 Adverse Effects on Tourism

Tourism is critically important to Jefferson County's economy. Much of the success of Jefferson County's tourism industry can be credited to the bucolic scenery of farm land and pastures, natural resources, rich history, the thoroughbred industry and the race track and casino. These key elements support and enable other aspects of our tourism industry like agro-tourism, farmer's markets, and scenic hiking trails. Rezoning at the site in Ranson will allow for the type of industry that negatively impacts these elements that encourage tourism in Jefferson County. The resulting harm to our tourist industry will surely drive away visitors and decrease personal state, county, and local revenue.

According to a 2019 study⁵⁷ by the West Virginia Tourism Office, Jefferson County generated more tourism-derived revenue for state and local governments than any other county in West Virginia in the last 10 years. State and local government revenue from sales tax, fuel tax, hotel tax, and other travel-related spending averaged over \$178 million per year in the preceding decade, totaling almost \$1.8 billion. Over the last 10 years, no other county in West Virginia generated even half of this level of revenue from tourism. West Virginia businesses and our local economies also benefit from tourist spending. In 2018, tourism generated \$213.7 million in individual earnings and \$842.6 million in direct spending in Jefferson County.

It is important to note that most of the money generated by tourism in Jefferson County comes from neighboring states. The tourism industry is not simply recycling local dollars but actively bringing in money from biotech economy of Maryland, hi-tech economy of northern Virginia, and political economy of DC and use it to power our own and that of our state. The powerful draw of our local tourism industry allows Jefferson County to harness the success of neighboring areas and direct it back into our own local economy.

One of the important drivers for tourism in Jefferson County is the Appalachian Trail. According to the Appalachian Trail Conservancy, Harpers Ferry is the psychological midpoint of the Trail. Hikers often plan extended stays in Jefferson County, which creates an obvious positive for our tourism industry. Open vistas and human impact on the environment were found to be among the elements most often perceived and listed as having an effect on the visitor's experience on the Appalachian Trail.⁵⁸ A study by Kaplan found that points of interests and views drew visitors' attention and had a significant impact on their perception of the trail.⁵⁹ It was also found that particularly beautiful vistas helped visitors overlook elements that usually have a negative effect on trail experience like increased trail traffic. Another study published in *Leisure Sciences* revealed that scenic value was a perceptual theme of Appalachian Trail visitors, and that things as simple as dead trees visible in a vista can have a negative impact on visitors' overall perception.⁶⁰ The introduction of industrial activity made possible by the proposed rezoning in Ranson would have a negative effect on the scenic views of unspoiled landscape from the Appalachian Trail in Jefferson County. For example, the smokestacks and associated lights at the Rockwool plant in Ranson will be visible from 15 vistas on the Appalachian Trail (Appalachian Trail conservancy), 3 of the 5 main entrances into the county, and both of the main driving routes used by tourists. Multiple studies show that the perception of pollution is correlated with stress, annoyance, and symptoms of depression.^{61 62} The presence of large industrial installations in

Jefferson County's viewshed will diminish the appeal our natural landscape has to Appalachian Trail tourists and any other potential visitors driving through our county.

Perceived air quality is another feature that attracts tourists to Jefferson County. Air pollution associated with smokestacks will therefore have a negative effect on tourists' desire to visit Jefferson County. Fine mode (0.1-2.5µm) particles are associated with air pollution caused by the burning of fossil fuels and gas-to-particle conversion of pollutants such as sulfur dioxide, nitrogen oxides, and volatile organic compounds. These particles remain in the atmosphere for days to weeks and alter the appearance of the atmosphere by scattering and absorbing solar radiation. The ultimate outcome of this type of air pollution is regional haze.⁶³ The effect of regional haze on tourists was explored in a review article published in the *Atmospheric Environment* titled "Impaired visibility: the air pollution people see." A key takeaway on the negative affect of haze on vacationing tourists was summarized as follows:

"Vacations offer an escape from the routine and stress of our daily lives. Vacation destinations are often chosen based on their scenery; vacations are spent gazing at monuments, mountains, clouds, and oceans. Good visibility allows clear observation of distant features and appreciation of the inherent beauty of these scenes... Air pollution, which is often present in both our cities and parks, interferes with these attributes and can ruin the views vacationers travel to enjoy."

People seek bucolic, unspoiled areas to escape the stresses of urban areas. Perceived pollution in urban areas causes stress while viewing natural scenes has both psychological and physiological benefits.⁷⁶⁴ The combination of smokestacks and haze will mar the viewshed in Jefferson County which will not only reduce the positive effects of a scenic landscape but also leave tourists disappointed and dissatisfied with their choice of destination.⁶⁵

Allowing the zoning change at the site in Ranson also risks Jefferson County's reputation of having environmental-friendly, sustainable industry. Empirical studies show that qualities associated with sustainability have a positive impact on the competitiveness of a tourism destination. In fact, sustainability factors are often one of the most influential factors for determining competitiveness for tourist destinations.⁶⁶ The sight of smokestacks disgorging particulate matter into a hazy landscape is unlikely to evoke thoughts of sustainability in visitors driving into the county or gazing out from the Appalachian Trail. This type of industrial activity is at odds with the pastoral image cultivated by our local farmland, farmers' markets, and fruit and vegetable stands.

There are certain factors that have been shown to be associated with successful development of rural tourism.⁶⁷ These factors include having a complete tourism package, good leadership, and support and participation from local government. Focus group participants from successful communities have noted that zoning and other local activities were most important to making communities attractive to tourists. In less successful communities, a lack of appropriate zoning and cooperation between local governments, led to eyesores and unattractive environments. Focus group participants from successful communities also cited good leadership, in the form of people who understood the importance of tourism, as crucial to the success of tourism. The support and participation of local government was also found to be important to the success of

tourism in these communities. The most important factors were described to be zoning and maintenance of the community

By rezoning this area of the county, Ranson is demonstrating that it does not have an understanding or concern for the detrimental effect this action would have on tourism in surrounding municipalities. This lack of communication and cooperation with neighboring areas is unfortunately the type of behavior associated with communities that have less success in developing and maintaining local tourism industries. Ranson needs to understand that the actions it takes here will affect tourism in every municipality throughout the county. Rezoning would allow the type of industry that would dramatically reduce Jefferson County's appeal to visitors and have a negative impact on the success of our local tourism industry. The only way to realize the full potential of Jefferson County's tourism industry is for local governments to work together to make coordinated and sustainable decisions about zoning.

4.3.2 Adverse Effects on Equine Industry

Ranson's proposed zoning change presents a significant risk to the equine industry in Jefferson County. The type of industry that would be allowed by the proposed zoning change in this location would jeopardizes horse health and threaten the long-term viability of the equine industry in the county.

The site of the proposed rezoning is less than six miles from Charles Town Races, a thoroughbred track with a year-round meet. There are also several breeding, training, and rehabilitation farms and facilities within the six-mile radius of the site in Ranson. Industrial activity typically emits a multitude of hazardous air pollutants capable of dispersing to sites several miles away, even when plants comply with permitted limits. It is therefore likely that pollutants from industrial activity at the proposed site in Ranson will have the potential to affect horses stabled several miles away.

Horses appear to be more sensitive to inhaled particulate matter than humans. According to a recent study published in the *Journal of Veterinary Internal Medicine*⁶⁸, horses are 15 times more sensitive to inhaled particulate matter than humans. Inhaled particulate matter can cause inflammation in horses that negatively affects performance even at subclinical levels i.e. levels undetectable without advanced diagnostics. Inhaled particulate matter is also a known contributor to the development of inflammatory airway disease (IAD)⁶⁹. IAD is a chronic airway disease that can affect horses long after their racing career is over. According to the West Virginia Department of Environmental Protections (WVDEP) air permit, the Rockwool plant in Ranson is permitted to emit 250.87 tons of particulate matter per year into the air⁷⁰.

While there is little research on how specific air pollutants affect horses, there are several observations that can be made on the effects of pollution on humans to infer potential impact on horses. Horses exposure times to pollutants are much longer when compared to typical human models because horses live outside. Horses that are housed near the site in Ranson and worked in this area year-round will also be continually exposed to air pollution. Additionally, horses must perform at maximal intensity exercise while typical models looking at human sensitivity to

pollution are not done at maximal exercise. These comparisons suggest that horses will likely experience detrimental effects at lower levels of air pollution than humans.

The primary concern about air pollution is that increased levels of pollutants will increase inflammation in horses' lungs. Even small, subclinical amounts of inflammation in the lungs of horses negatively affect performance⁷¹. This inflammation can also cause increased recovery times following racing⁷². Reduced performance and training interruptions can lead to higher risk of injury, reduced winning average, fewer yearly starts, lower yearly earnings, shortened career length, fewer lifetime starts, reduced lifetime earnings, and reduced quality of life⁷³. Each of these situations will lead to decreased return on investment, decreased cash flow, and decreased overall earnings for owners, trainers, and breeders with horses at Charles Town Races and in nearby areas.

While racing is usually a thoroughbred's first career, it is rarely their last. Some racing horses go on to be breeding stock, while others will have successful careers as sport horses. However, if they are unsound from injury or respiratory disease, they can be difficult to manage as breeding stock or unfit for a career as a sport horse. This affects the horse's quality of life and also places a burden on the industry by reducing the lifetime productivity of each horse.

Another concern related to the proposed rezoning in Ranson is the risk of groundwater contamination as a result of industrial activity. If local groundwater becomes contaminated, owners will not know until their animals are sick. Symptoms are likely to be non-specific and insidious in onset, and the underlying cause may be difficult to determine without extensive veterinary intervention. It may even become necessary for horsemen to periodically test water sources to determine if they are contaminated. All of this adds expense and uncertainty to an industry that already deals with large inherent risks.

The actual occurrence of groundwater contamination would be devastating for Jefferson County's equine industry. Breeding, raising, training, and even maintaining horses would be absolutely cost prohibitive on utility-provided water. For both geographic and financial reasons, it is simply impossible to think that the industry could use public or private utility-provided water if industrial activity fouled the local groundwater.

The equine industry in Jefferson County is hundreds of years old. It is not worth risking this historic and economically valuable industry by rezoning for industrial companies like Rockwool. An economic impact study of the Charles Town Thoroughbred Horse Racing Industry on Jefferson County's economy found that the spending by owners, breeders, and trainers of the equine industry directly contributes \$79.4 million to the county each year. Out-of-state owners, breeders, and trainers spend more than \$50 million in Jefferson County every year. The value of total business volume in Jefferson County is \$191 million each year⁷⁴. These numbers do not include the effect of the handle (betting) or the casino which totals over \$63 million per year. Rockwool promises it will provide 120 jobs (WVEDA bond agreement of May 2019).

The equine industry offers so many benefits that the industry in the rezoned area would not. For example, the equine industry supports local agriculture by providing a market for agricultural goods such as straw. The robust straw market supported by owners, trainers, and breeders allows

for a third cash crop to be produced from one field in a year. This symbiotic relationship is an example of how local consumption of locally produced agricultural products has multiplicative benefits to the local economy⁷⁵. Through pastureland and support of local agricultural goods, the equine industry protects and preserves the open spaces that give our county its bucolic quality and help attract tourists. Through the breeders' incentive programs, the equine industry offers unique opportunities to draft state funds back to Jefferson County. Through the handle, its support of local agriculture, its stewardship of pastureland, and its enabling of spending by owners, breeders, trainers, the equine industry brings in tens of millions of dollars from outside the state into Jefferson County each year.

The equine industry provides jobs for a broad cross-section of the public. This industry offers individuals of any educational background a variety of paths to achieve a good middle-income living. Many jobs allow individuals to pursue apprenticeships or on-the-job training rather than requiring a costly college education. This flexibility allows for greater lifetime earnings and improved educational debt-to-earnings ratio for these workers. The equine industry's support of on-the-job education is yet another example of how Jefferson County has already embraced practices only now being recognized and promoted in the rest of the country. The equine industry also provides opportunities for non-traditional workers by offering job opportunities to those who may not be employable by larger corporations. This industry provides a variety of fulltime, part-time, flexible, and pick-up work. Encouraging this type of flexible job ecosystem helps create a healthy economy with broad participation in employment and consumption.

Rezoning this area of Jefferson County for Special District Industrial will allow in entities whose activities are harmful to our equine industry. The losses incurred by the equine industry would far outweigh any benefits derived from industries occupying the rezoned area. Sacrificing the long-term viability of one of our oldest and most productive industries for a net loss in business volume and economic value just does not make good sense for the Jefferson County economy.

4.3.3 Adverse Effects on Agriculture

Agriculture has been part of our economy and way of life in the Shenandoah region of the Great Valley for over 270 years. This industry has continued as a robust part of our economy since those days. At one point being known as the breadbasket of early America, what is now Jefferson County has excellent fertile soil. The early settlers followed the Great Valley down from New Jersey and Pennsylvania to the Shenandoah Valley for precisely this reason.

Unlike the bygone era of heavy industry, local agriculture and local consumption of agricultural goods are a boon to our local economy. According to the 2012 agricultural economy report, West Virginia had over \$806 million in agricultural sales. Jefferson County is among the top 10 counties in the state, for sales in every major commodity group. There were \$668 million in sales from animals and animal products in West Virginia, and Jefferson County was in the top 9 counties for animal and animal product sales. Field crops represented \$106 million in sales in the state and Jefferson County was the second highest producing county with more than \$10 million in sales. Jefferson County is the third highest county for vegetables and fruit sales with over 1.9 million in sales of the states 32 million in sales (Figure 8)⁷⁶.

Agriculture supports other local industries well beyond just supplying customers in the form of their employees. Agriculture supports tourism through agro-tourism, supports the bucolic nature of our county by preserving beautiful open spaces, and provides the locally produced agriculture goods many tourists are looking for in our markets and restaurants. Agriculture helps maintain the way of life many of the commuters who choose to live in Jefferson County enjoy.

Agriculture supports the equine industry in a multitude of ways by providing local products like hay and straw, helping maintain pasture land, co-supporting local dual purpose retail stores, and helping recycle by products. Heavy industry could never achieve these things.

The industry that this zoning change in Ranson will provide for in this location has the potential to devastate the agricultural industry in our county. First, the air pollution associated with heavy industry causes decreased yields of both quantity and quality for several of the crops important to Jefferson County including winter wheat and soybeans⁷⁷. As yields decline for locally consumed crops like straw (from winter wheat) used in the equine industry, prices rise hurting both the producer and the consumer. Far more devastating is the possibility of ground water contamination. As explained in a separate fact sheet in this series, the hydrogeology in this location causes a very high level of groundwater aquifer vulnerability. Because of the large amount of pollution that heavy industry produces, the combination of these two factors makes the likelihood of groundwater contamination in this location very high. Agriculture in Jefferson County depends on groundwater. Without high quality groundwater, the management of livestock would be absolutely cost prohibitive in Jefferson County.

From the hardships of decreased yield to the devastation of ground water contamination, the industry that this zoning change in Ranson will provide for will negatively affect the agriculture industry in Jefferson County. Agriculture is a historic industry in Jefferson County that plays an important part in our economy and society that could not be replaced by heavy industry.

4.4 Adversely affect the safety of the community and region

This zoning change would adversely affect the water resources for a majority, including major industries, and municipalities. It would also endanger the water resources of northern Virginia and Maryland.

As described above in a dye test, the USGS found that the water from just adjacent to this site emerged in the headwaters of both the Elk's Run, Rattlesnake Run and one of the 6 springs that feeds the Town Run in Shepherdstown.⁷⁸ (Figures 5 and 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figures 5 and 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figures 5 and 6). The Town Run runs right through the middle of town where children play and learn to fish. The headwaters of Rattlesnake Run are a spring about 3.5 miles from the site and is also a tributary of the Potomac River. These are just three of the examples the dye test demonstrated of how the groundwater at the site communicates with and affects the surface waters in the county. This site is in the Rocky Marsh Run watershed, which is in the source water

protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams.

A great majority of people in Jefferson County rely on ground water for their water needs. Most of these people rely on personal well water. Our equine and agriculture industries also rely on groundwater. The Potomac River provides water to many communities downstream including a million gallons a day for Frederick and 40 million gallons a day to Loudoun. The combination of the effects on ground and surface water will endanger the drinking water for tens to hundreds of thousands of people. This is a huge safety concern and means that this zoning change would undoubtedly adversely affect the community.

5.0 Community Engagement

In several locations throughout the Comprehensive Plan public engagement is mentioned. An example is on page 33 under Community Design Objectives and states: “Engage the whole community in planning constructively. While the needs of particular stakeholders and neighboring property owners must be considered, projects should be planned with the wider community in mind.” This was clearly not achieved in the process. The neighboring property owners were not included in this process and had no idea the nature of the entity being zoned for in this location.

6.0 Environmental Discrimination and Human Rights

The area surrounding the location, of the proposed zoning change that, is historically lower income and underserved. Deciding to locate a tract of such zoning in this location when is it on the whole unwanted and totally inappropriate for the land and surroundings is an example of environmental injustice. The Lancet Commission on Pollution and Health, citing the United Nation’s Universal Declaration of 1948 on Human Rights, found that “pollution threatens fundamental human rights - the right to life, the right to health, the right to well-being, and the rights of the child.” This rezoning represents not only a bygone era of economic development but also a bygone era of environmental injustice and human rights violation.

The Lancet Commission on Pollution and Health further found that prevention of non-communicable diseases will require pollution prevention and that this will require fundamental changes in societal patterns of production, consumption, and transportation. This will require a paradigm shift to a more sustainable economic model based on recognition of human rights. They also found this is a major unexploited opportunity in society that many communities are grappling with undertaking. The movement away from the smart code zoning, with it integrated walkable communities, to large tracts of land dedicated to polluting industry close to a title one school is the exact opposite of this. This rezoning would represent a major step in the wrong direction for disease prevention, human rights, Ranson, and Jefferson County!

7.0 Conclusion

This zoning change will violate the intention of the comprehensive plan of Ranson to provide ample affordable housing in complete communities that will allow residents to live, work, and

shop in the same community. Instead, it will promote replacing them with a single-use area that would be a separate pod of land use. This zoning change will also allow land to be used for industry that it is totally inappropriate and ill-suited to, endangering the water resources and water safety. Through its air emissions, effects on local industry, and water quality the industry this zoning will provide for will adversely affect the health, safety and welfare of the community. This zoning change adds no additional advantage to the residents of Ranson and violates the comprehensive plan in several key areas working in contrast to the goals, objectives and actions of the comprehensive plan. This will result in consequences that were intended to be prevented by the comprehensive plan. Please vote NO zoning ordinance #2017-302.

Sincerely,

Lynn Delles

¹ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

² Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4

³ CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009

⁴ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area*, US GEOLOGICAL SURVEY, 1991

- Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.
- Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. *Field Guides*. 2015 Sep 1;40:425-84.
- Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).
- ⁵ Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. *Earth-Science Reviews*. 2014 Nov 1;138:61-88.
- Ford D, Williams PD. *Karst hydrogeology and geomorphology*. John Wiley & Sons; 2013 May 3.
- Zhou W, Beck BF. Engineering issues on karst. In *Karst management 2011* (pp. 9-45). Springer, Dordrecht.
- ⁶ Carpenter DL, Connelly DT, M Innis. Project Shuttle, Site Characterization Report VRP (Volunteer Remediation Plan) Parcel Jefferson Orchards Site. *Environmental Resources Management*. 2017 Sept.
- ⁷ Kozar MD, Hobba WA, Macy JA. Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area, US GEOLOGICAL SURVEY, 1991
- ⁸ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.
- ⁹ Doerfliger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). *Environmental Geology*. 1999 Dec 1;39(2):165-76.
- ¹⁰ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.
- Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. *Field Guides*. 2015 Sep 1;40:425-84.
- Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).
- ¹¹ Project Shuttle -New Industrial Site at the former Jefferson Orchard Kearneysville, Jefferson County, West Virginia Specialized Engineering Project No. 177164, Specialized Engineering 4845 International Blvd, Suite 104 Frederick, MD 21703, July 11, 2017
- ¹² CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009
- ¹³ Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4
- ¹⁴ Kyle AD, Wright CC, Caldwell JC, Buffler PA, Woodruff TJ. Evaluating the health significance of hazardous air pollutants using monitoring data. *Public health reports*. 2001;116(1):32-44.
- ¹⁵ Health Effects Institute (HEI) and Institute for Health Metrics and Evaluation (IHME), d. State of global air – 2018. Available at: <https://www.stateofglobalair.org>.
- ¹⁶ Landrigan PJ, Fuller R, Fisher S, Suk WA, Sly P, Chiles TC, Bose-O'Reilly S. Pollution and children's health. *Science of The Total Environment*. 2019 Feb 10;650:2389-94.
- World Health Organization (WHO), 2018. *Inheriting a Sustainable World? Atlas on Children's Health and the Environment*. WHO, Geneva Available at: <http://www.who.int/ceh/publications/inheriting-a-sustainable-world/en/>
- Barker, D.J., 2004. The developmental origins of adult disease. *J. Am. Coll. Nutr.* 23 (588S– 95S).
- ¹⁷ Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., N, Basu, et al., 2017. The Lancet Commission on pollution and health. *Lancet* [https://doi.org/10.1016/S0140-6736\(17\)32345-0](https://doi.org/10.1016/S0140-6736(17)32345-0).
- ¹⁸ National Academy of Sciences, 1993. *Pesticides in the Diets of Infants and Children*. National Academies Press, Washington, DC.
- ¹⁹ Leibel S, Post M. Endogenous and exogenous stem/progenitor cells in the lung and their role in the pathogenesis and treatment of pediatric lung disease. *Front Pediatr* 2016;4:36.

- ²⁰ Boda E, Rigamonti AE, Bollati V. Understanding the effects of air pollution on neurogenesis and gliogenesis in the growing and adult brain. *Current Opinion in Pharmacology*. 2020 Feb 1;50:61-6.
- ²¹ Korten I, Ramsey K, Latzin P. Air pollution during pregnancy and lung development in the child. *Paediatric respiratory reviews*. 2017 Jan 1;21:38-46.
- ²² Kajekar R. Environmental factors and developmental outcomes in the lung. *Pharmacol Ther* 2007;114(2):129-45.
- ²³ LiY-F, LangholzB, SalamMT, GillilandFD. Maternal and grandmaternal smoking patterns are associated with early childhood asthma. *Chest* 2005;127(4): 1232-41.
- ²⁴ Boda E, Rigamonti AE, Bollati V. Understanding the effects of air pollution on neurogenesis and gliogenesis in the growing and adult brain. *Current Opinion in Pharmacology*. 2020 Feb 1;50:61-6.
- ²⁵ Block, M. L., & Calderón-Garcidueñas, L. (2009). Air pollution: Mechanisms of neuroinflammation and CNS disease. *Trends in Neurosciences*, 32(9), 506-516.
- ²⁶ Calderón-Garcidueñas L, Leray E, Heydarpour P, Torres-Jardón R, Reis J. Air pollution, a rising environmental risk factor for cognition, neuroinflammation and neurodegeneration: the clinical impact on children and beyond. *Revue neurologique*. 2016 Jan 1;172(1):69-80.
- Perera FP. Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change. *Environmental health perspectives*. 2017 Feb;125(2):141-8.
- Woodruff TJ, Darrow LA, Parker JD. Air pollution and postneonatal infant mortality in the United States, 1999-2002. *Environmental Health Perspectives*. 2008 Jan;116(1):110-5.
- Jacobs M, Zhang G, Chen S, Mullins B, Bell M, Jin L, Guo Y, Huxley R, Pereira G. The association between ambient air pollution and selected adverse pregnancy outcomes in China: a systematic review. *Science of The Total Environment*. 2017 Feb 1;579:1179-92.
- ²⁷ Lyall K, Schmidt RJ, Hertz-Picciotto I. Maternal lifestyle and environmental risk factors for autism spectrum disorders. *International journal of epidemiology*. 2014 Apr 1;43(2):443-64.
- Rossignol DA, Genuis SJ, Frye RE. Environmental toxicants and autism spectrum disorders: a systematic review. *Translational psychiatry*. 2014 Feb;4(2):e360-.
- Ornoy A, Weinstein-Fudim L, Ergaz Z. Prenatal factors associated with autism spectrum disorder (ASD). *Reproductive toxicology*. 2015 Aug 15;56:155-69.
- ²⁸ Shier V, Nicosia N, Shih R, Datar A. Ambient air pollution and children's cognitive outcomes. *Population and Environment*. 2019 Mar 15;40(3):347-67.
- ²⁹ Ham JC, Zweig JS, Avol E. Pollution, test scores and distribution of academic achievement: Evidence from California schools 2002-2008. Available at econweb.umd.edu/~ham/Pollution_all_accept_feb%202014a.pdf. Accessed December. 2014;18:2016.
- Miller, S. J., & Vela, M. A. (2013). The effects of air pollution on educational outcomes: Evidence from Chile. Inter-American Development Bank. IDB Working Paper Series No. IDB-WP-468.
- ³⁰ Currie J, Hanushek EA, Kahn EM, Neidell M, Rivkin SG. Does pollution increase school absences?. *The Review of Economics and Statistics*. 2009 Nov 1;91(4):682-94.
- Gilliland FD, Berhane K, Rappaport EB, Thomas DC, Avol E, Gauderman WJ, London SJ, Margolis HG, McConnell R, Islam KT, Peters JM. The effects of ambient air pollution on school absenteeism due to respiratory illnesses. *Epidemiology*. 2001 Jan 1;43:54.
- Mohai P, Kweon BS, Lee S, Ard K. Air pollution around schools is linked to poorer student health and academic performance. *Health Affairs*. 2011 May 1;30(5):852-62.
- ³¹ Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.
- Martino D, Prescott S. Epigenetics and prenatal influences on asthma and allergic airways disease. *Chest*. 2011; 139:640-647.
- Pinkerton KE, Joad JP. Influence of air pollution on respiratory health during perinatal development. *Clin Exp Pharmacol Physiol*. 2006; 33:269-272.
- Gauderman WJ, Urman R, Avol E, et al. Association of improved air quality with lung development in children. *N Engl J Med*. 2015; 372:905-913.
- ³² Korten I, Ramsey K, Latzin P. Air pollution during pregnancy and lung development in the child. *Paediatric respiratory reviews*. 2017 Jan 1;21:38-46.

Gauderman WJ, Urman R, Avol E, et al. Association of improved air quality with lung development in children. *N Engl J Med*. 2015; 372:905–913.

³³ Carosino CM, Bein KJ, Plummer LE, et al. Allergic airway inflammation is differentially exacerbated by daytime and nighttime ultrafine and submicron fine ambient particles: heme oxygenase-1 as an indicator of PM-mediated allergic inflammation. *J Toxicol Environ Health A*. 2015; 78:254–266.

Wiegman CH, Li F, Clarke CJ, et al. A comprehensive analysis of oxidative stress in the ozone-induced lung inflammation mouse model. *Clin Sci (Lond)*. 2014; 126:425–440.

Li R, Kou X, Tian J, et al. Effect of sulfur dioxide on inflammatory and immune regulation in asthmatic rats. *Chemosphere*. 2014; 112:296–304.

³⁴ Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.

Samoli E, Nastos PT, Paliatatos AG, Katsouyanni K, Priftis KN. Acute effects of air pollution on pediatric asthma exacerbation: evidence of association and effect modification. *Environmental research*. 2011 Apr 1;111(3):418-24.

Shin SW, Bae DJ, Park CS, Lee JU, Kim RH, Kim SR, Chang HS, Park JS. Effects of air pollution on moderate and severe asthma exacerbations. *Journal of Asthma*. 2019 May 23:1-1.

³⁵ Schikowski T, Mills IC, Anderson HR, et al. Ambient air pollution: a cause of COPD? *Eur Respir J*. 2014; 43:250–263.

Tsai SS, Chang CC, Yang CY. Fine particulate air pollution and hospital admissions for chronic obstructive pulmonary disease: a case-crossover study in Taipei. *International journal of environmental research and public health*. 2013; 10:6015–6026.

³⁶ Anderson DS, Patchin ES, Silva RM, et al. Influence of Particle Size on Persistence and Clearance of Aerosolized Silver Nanoparticles in the Rat Lung. *Toxicological Sciences*. 2015; 144:366–381.

³⁷ Yu XJ, Yang MJ, Zhou B, et al. Characterization of Somatic Mutations in Air Pollution-Related Lung Cancer. *EBioMedicine*. 2015; 2:583–590.

Loomis D, Huang W, Chen G. The International Agency for Research on Cancer (IARC) evaluation of the carcinogenicity of outdoor air pollution: focus on China. *Chin J Cancer*. 2014; 33:189–196.

Raaschou-Nielsen O, Andersen ZJ, Beelen R, et al. Air pollution and lung cancer incidence in 17 European cohorts: prospective analyses from the European Study of Cohorts for Air Pollution Effects (ESCAPE). *Lancet Oncol*. 2013; 14:813–822.

Chen G, Wan X, Yang G, Zou X. Traffic-related air pollution and lung cancer: A meta-analysis. *Thorac Cancer*. 2015; 6:307–318. [PubMed: 26273377]

Villeneuve PJ, Jerrett M, Brenner D, et al. A case-control study of long-term exposure to ambient volatile organic compounds and lung cancer in Toronto, Ontario, Canada. *Am J Epidemiol*. 2014; 179:443–451.

Cesaroni G, Badaloni C, Gariazzo C, et al. Long-term exposure to urban air pollution and mortality in a cohort of more than a million adults in Rome. *Environ Health Perspect*. 2013; 121:324–331.

Jerrett M, Burnett RT, Beckerman BS, et al. Spatial analysis of air pollution and mortality in California. *Am J Respir Crit Care Med*. 2013; 188:593–599.

Hart JE, Spiegelman D, Beelen R, et al. Long-Term Ambient Residential Traffic-Related Exposures and Measurement Error-Adjusted Risk of Incident Lung Cancer in the Netherlands Cohort Study on Diet and Cancer. *Environ Health Perspect*. 2015; 123:860–866.

Puett RC, Hart JE, Yanosky JD, et al. Particulate matter air pollution exposure, distance to road, and incident lung cancer in the nurses' health study cohort. *Environ Health Perspect*. 2014; 122:926–932.

Hamra GB, Guha N, Cohen A, et al. Outdoor particulate matter exposure and lung cancer: a systematic review and meta-analysis. *Environ Health Perspect*. 2014; 122:906–911.

Hystad P, Demers PA, Johnson KC, et al. Long-term residential exposure to air pollution and lung cancer risk. *Epidemiology*. 2013; 24:762–772.

Tsoi CT, Tse LA. Professional drivers and lung cancer: a systematic review

³⁸ HEI Collaborative Working Group on Air Pollution P; Health in Ho Chi Minh C. Le TG, et al. Effects of short-term exposure to air pollution on hospital admissions of young children for acute lower respiratory infections in Ho Chi Minh City, Vietnam. *Res Rep Health Eff Inst*. 2012:5–72. discussion 73–83.

Darrow LA, Klein M, Flanders WD, et al. Air pollution and acute respiratory infections among children 0-4 years of age: an 18-year time-series study. *Am J Epidemiol*. 2014; 180:968–977.

Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.

³⁹ To T, Zhu J, Stieb D, Gray N, Fong I, Pinault L, Jerrett M, Robichaud A, Ménard R, van Donkelaar A, Martin RV. Early life exposure to air pollution and incidence of childhood asthma, allergic rhinitis and eczema. *European Respiratory Journal*. 2020 Feb 1;55(2).

⁴⁰ Estrella B, Naumova EN, Cepeda M, Voortman T, Katsikis PD, Drexhage HA. Effects of Air Pollution on Lung Innate Lymphoid Cells: Review of In Vitro and In Vivo Experimental Studies. *International journal of environmental research and public health*. 2019 Jan;16(13):2347.

⁴¹ Jerrett M, McConnell R, Wolch J, Chang R, Lam C, Dunton G, Gilliland F, Lurmann F, Islam T, Berhane K. Traffic-related air pollution and obesity formation in children: a longitudinal, multilevel analysis. *Environmental Health*. 2014 Dec 1;13(1):49.

McConnell R, Shen E, Gilliland FD, Jerrett M, Wolch J, Chang CC, Lurmann F, Berhane K. A longitudinal cohort study of body mass index and childhood exposure to secondhand tobacco smoke and air pollution: the Southern California Children's Health Study. *Environmental health perspectives*. 2015 Apr;123(4):360-6. Longitudinal associations of in utero and early life near-roadway air pollution with trajectories of childhood body mass index. Rundle A, Hoepner L, Hassoun A, Oberfield S, Freyer G, Holmes D, Reyes M, Quinn J, Camann D, Perera F, Whyatt R. Association of childhood obesity with maternal exposure to ambient air polycyclic aromatic hydrocarbons during pregnancy. *American journal of epidemiology*. 2012 Jun 1;175(11):1163-72.

⁴² Alderete TL, Habre R, Toledo-Corral CM, Berhane K, Chen Z, Lurmann FW, Weigensberg MJ, Goran MI, Gilliland FD. Longitudinal associations between ambient air pollution with insulin sensitivity, β -cell function, and adiposity in Los Angeles Latino children. *Diabetes*. 2017 Jul 1;66(7):1789-96.

Brook, R.D., Rajagopalan, S., Pope 3rd, C.A., et al., 2010. Particulate matter air pollution and cardiovascular disease: an update to the scientific statement from the American Heart Association. *Circulation* 121 (21), 2331–2378.

Qin XD, Qian Z, Vaughn MG, Trevathan E, Emo B, Paul G, Ren WH, Hao YT, Dong GH. Gender-specific differences of interaction between obesity and air pollution on stroke and cardiovascular diseases in Chinese adults from a high pollution range area: a large population based cross sectional study. *Science of the Total Environment*. 2015 Oct 1;529:243-8.

Brook RD, Sun Z, Brook JR, Zhao X, Ruan Y, Yan J, Mukherjee B, Rao X, Duan F, Sun L, Liang R. Extreme air pollution conditions adversely affect blood pressure and insulin resistance: the air pollution and cardiometabolic disease study. *Hypertension*. 2016 Jan;67(1):77-85.

Li J, Zhou C, Xu H, Brook RD, Liu S, Yi T, Wang Y, Feng B, Zhao M, Wang X, Zhao Q. Ambient air pollution is associated with HDL (high-density lipoprotein) dysfunction in healthy adults. *Arteriosclerosis, thrombosis, and vascular biology*. 2019 Mar;39(3):513-22.

⁴³ Nikolić M, Nikić D, Stanković A. Effects of air pollution on red blood cells in children. *Pol J Environ Stud*. 2008 Mar 1;17(28):267.

⁴⁴ Lu JG. Air pollution: a systematic review of its psychological, economic, and social effects. *Current opinion in psychology*. 2020 Apr 1;32:52-65.

⁴⁵ Graff Zivin J, Neidell M. The impact of pollution on worker productivity. *American Economic Review*. 2012 Dec;102(7):3652-73.

Chang T, Graff Zivin J, Gross T, Neidell M. Particulate pollution and the productivity of pear packers. *American Economic Journal: Economic Policy*. 2016 Aug;8(3):141-69.

Chang TY, Graff Zivin J, Gross T, Neidell M. The effect of pollution on worker productivity: evidence from call center workers in China. *American Economic Journal: Applied Economics*. 2019 Jan;11(1):151-72.

Hanna R, Oliva P. The effect of pollution on labor supply: Evidence from a natural experiment in Mexico City. *Journal of Public Economics*. 2015 Feb 1;122:68-79.

Bosi S, Desmarchelier D, Ragot L. Pollution effects on labor supply and growth. *International Journal of Economic Theory*. 2015 Dec;11(4):371-88.

Holub F, Hospido L, Wagner UJ. Air pollution and labor supply: Evidence from social security data.

⁴⁶ Graff Zivin J, Neidell M. The impact of pollution on worker productivity. *American Economic Review*. 2012 Dec;102(7):3652-73.

⁴⁷ Chang TY, Graff Zivin J, Gross T, Neidell M. The effect of pollution on worker productivity: evidence from call center workers in China. *American Economic Journal: Applied Economics*. 2019 Jan;11(1):151-72.

⁴⁸ Gauderman WJ. Air pollution and children--an unhealthy mix. *New England Journal of Medicine*. 2006 Jul 6;355(1):78-.

⁴⁹ Collins, T.J., Crews, D., DeFur, P.L., Dickerson, S.M., Edwards, T.M., Gore, A.C., Guillette, L.J., Hayes, T., Heindel, J.J., Moores, A., Patisaul, H.B., Tal, T.L., Thayer, K.A., Vandenberg, L.N., Warner, J.C., Watson, C.S., vom Saal, F.S., Zoeller, R.T., O'Brien, K.P., Myers, J.P., Schug, T.T., Abagyan, R., Blumberg, B., 2013. Designing endocrine disruption out of the next generation of chemicals. *Green Chem.* 15, 181–198. <https://doi.org/10.1039/c2gc35055f>.

Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Souza Dias, B.F., Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G.M., Marten, R., Myers, S.S., Nishtar, S., Osofsky, S.A., Pattanayak, S.K., Pongsiri, M.J., Romanelli, C., Soucat, A., Vega, J., Yach, D., 2015 Nov 14. Safeguarding human health in the Anthropocene epoch: report of the Rockefeller Foundation-Lancet Commission on planetary health. *Lancet* 386 (10007), 1973–2028. [https://doi.org/10.1016/S0140-6736\(15\)60901-1](https://doi.org/10.1016/S0140-6736(15)60901-1) (Epub 2015 Jul 15).

McMichael, A.J., 2017. *Climate Change and the Health of Nations: Famines, Fevers, and the Fate of Populations*. Oxford University Press, London.

World Economic Forum, January, 2014. *Towards the Circular Economy: accelerating the scale-up across global supply chains*. http://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf.

⁵⁰ Landrigan PJ, Fuller R, Fisher S, Suk WA, Sly P, Chiles TC, Bose-O'Reilly S. Pollution and children's health. *Science of The Total Environment*. 2019 Feb 10;650:2389-94.

Matos EP, Reisen VA, Serpa FS, Prezolti Filho PR, Leite MD. Space-time analysis of the effect of air pollution on children's health. *Cadernos de saude publica*. 2019 Oct 7;35:e00145418.

⁵¹ Small Business is Good for Local Economies; Big Business is Not, Researchers Say, *Business News Daily*, 2020 Feb 26; <https://www.businessnewsdaily.com/1298-small-business-good-for-economy.html>

⁵² Lego B, Deskins J, *The Eastern Panhandle Economic Outlook 2020-2024*, Bureau of Business & Economic Research, West Virginia University, John Chambers College of Business & Economics, 2019.

⁵³ Irvine W, Anderson AR. Small tourist firms in rural areas: agility, vulnerability and survival in the face of crisis. *International journal of entrepreneurial behavior & research*. 2004 Aug 1.

⁵⁴ Small AW, Downey EA. Orchestrating multiple changes: a framework for managing concurrent changes of varied type and scope. *INEMC 96 Proceedings. International Conference on Engineering and Technology Management. Managing Virtual Enterprises: A Convergence of Communications, Computing, and Energy Technologies 1996 Aug 18 (pp. 627-634)*. IEEE.

⁵⁵ Verstraete C. Planning for the unexpected [business agility]. *Manufacturing Engineer*. 2004 Jun 1;83(3):18-21.

⁵⁶ Goodhue DL, Chen DQ, Boudreau MC, Cochran J. Addressing business agility challenges with enterprise systems. 2009.

⁵⁷ *West Virginia travel impacts 200-2018p*, prepared by Dean Runyan Associates, prepared for the West Virginia Tourism Office Charleston, West Virginia. 2019

-
- ⁵⁸ Taylor JG, Czarnowski KJ, Sexton NR, Flick S. The importance of water to Rocky Mountain National Park visitors: an adaptation of visitor-employed photography to natural resources management. *Journal of Applied Recreation Research*. 1995;20(1):61-85.
- ⁵⁹ Kaplan R, Kaplan S, Ryan R. *With people in mind: Design and management of everyday nature*. Island press; 1998.
- ⁶⁰ Dorwart CE, Moore RL, Leung YF. Visitors' perceptions of a trail environment and effects on experiences: A model for nature-based recreation experiences. *Leisure Sciences*. 2009 Dec 23;32(1):33-54.
- ⁶¹ Mace BL, Bell PA, Loomis RJ. Visibility and natural quiet in national parks and wilderness areas: Psychological considerations. *Environment and Behavior*. 2004 Jan;36(1):5-31.
- ⁶² Evans GW, Jacobs SV. Air pollution and human behavior. *Journal of Social Issues*. 1981 Jan;37(1):95-125.
- ⁶³ Chameides WL, Yu H, Liu SC, Bergin M, Zhou X, Mearns L, Wang G, Kiang CS, Saylor RD, Luo C, Huang Y. Case study of the effects of atmospheric aerosols and regional haze on agriculture: an opportunity to enhance crop yields in China through emission controls?. *Proceedings of the National Academy of Sciences*. 1999 Nov 23;96(24):13626-33.
- ⁶⁴ Velarde MD, Fry G, Tveit M. Health effects of viewing landscapes—Landscape types in environmental psychology. *Urban Forestry & Urban Greening*. 2007 Nov 15;6(4):199-212.
- ⁶⁵ Doyle M, Dorling S. Visibility trends in the UK 1950–1997. *Atmospheric Environment*. 2002 Jul 1;36(19):3161-72.
- ⁶⁶ Cucculelli M, Goffi G. Does sustainability enhance tourism destination competitiveness? Evidence from Italian Destinations of Excellence. *Journal of Cleaner Production*. 2016 Jan 16;111:370-82.
- ⁶⁷ Wilson S, Fesenmaier DR, Fesenmaier J, Van Es JC. Factors for success in rural tourism development. *Journal of Travel research*. 2001 Nov;40(2):132-8.
- ⁶⁸ Ivester KM, Couëtill LL, Moore GE. An observational study of environmental exposures, airway cytology, and performance in racing thoroughbreds. *Journal of veterinary internal medicine*. 2018 Sep;32(5):1754-62.

⁶⁹ Couëtil LL, Cardwell JM, Gerber V, Lavoie JP, Léguillette R, Richard EA. Inflammatory airway disease of horses—revised consensus statement. *Journal of veterinary internal medicine*. 2016 Mar;30(2):503-15.;

⁷⁰ https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/037-00108_IPR_R14-0037.pdf;

⁷¹ https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/037-00108_IPR_R14-0037.pdf;

Richard EA, Fortier GD, Pitel PH, Dupuis MC, Valette JP, Art T, Denoix JM, Lekeux PM, Van Erck E. Sub-clinical diseases affecting performance in Standardbred trotters: diagnostic methods and predictive parameters. *The Veterinary Journal*. 2010 Jun 1;184(3):282-9.;

Holcombe SJ, Robinson NE, Derksen FJ, Bertold B, Genovese R, Miller R, Rupp HD, Carr EA, Eberhart SW, Boruta D, Kaneene JB. Effect of tracheal mucus and tracheal cytology on racing performance in Thoroughbred racehorses. *Equine veterinary journal*. 2006 Jul 1;38(4):300-4.;

Sanchez A, Couetil LL, Ward MP, Clark SP. Effect of airway disease on blood gas exchange in racehorses. *Journal of veterinary internal medicine*. 2005 Jan;19(1):87-92.;

Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

⁷² Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

⁷³ Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

Hernandez J, Hawkins DL, Scollay MC. Race-start characteristics and risk of catastrophic musculoskeletal injury in Thoroughbred racehorses. *Journal of the American Veterinary Medical Association*. 2001 Jan 1;218(1):83-6.;

Auer JA, Stick JA. *Equine Surgery* 4th edn, Saunders, 2012.;

Hernandez J, Hawkins DL, Scollay MC. Race-start characteristics and risk of catastrophic musculoskeletal injury in Thoroughbred racehorses. *Journal of the American Veterinary Medical Association*. 2001 Jan 1;218(1):83-6.;

Auer JA, Stick JA. *Equine Surgery* 4th edn, Saunders, 2012.;

⁷⁴ Witt T, Meinert T. *The Economic Impact of the Charles Town Thoroughbred Horse Racing Industry on the Jefferson County a*. 2011

⁷⁵ Masi B. *The 25% shift: The benefits of food localization for Northeast Ohio and how to realize them*. Cleveland-Cuyahoga County Food Policy Coalition; 2010.

⁷⁶ A Shared Agenda For Growing West Virginia's Agricultural Economy, Prepared by Fourth Economy for West Virginia Department Of Agriculture West Virginia University Extension Service 2012.

⁷⁷ Fuhrer J. Ozone risk for crops and pastures in present and future climates. Naturwissenschaften. 2009 Feb 1;96(2):173-94.

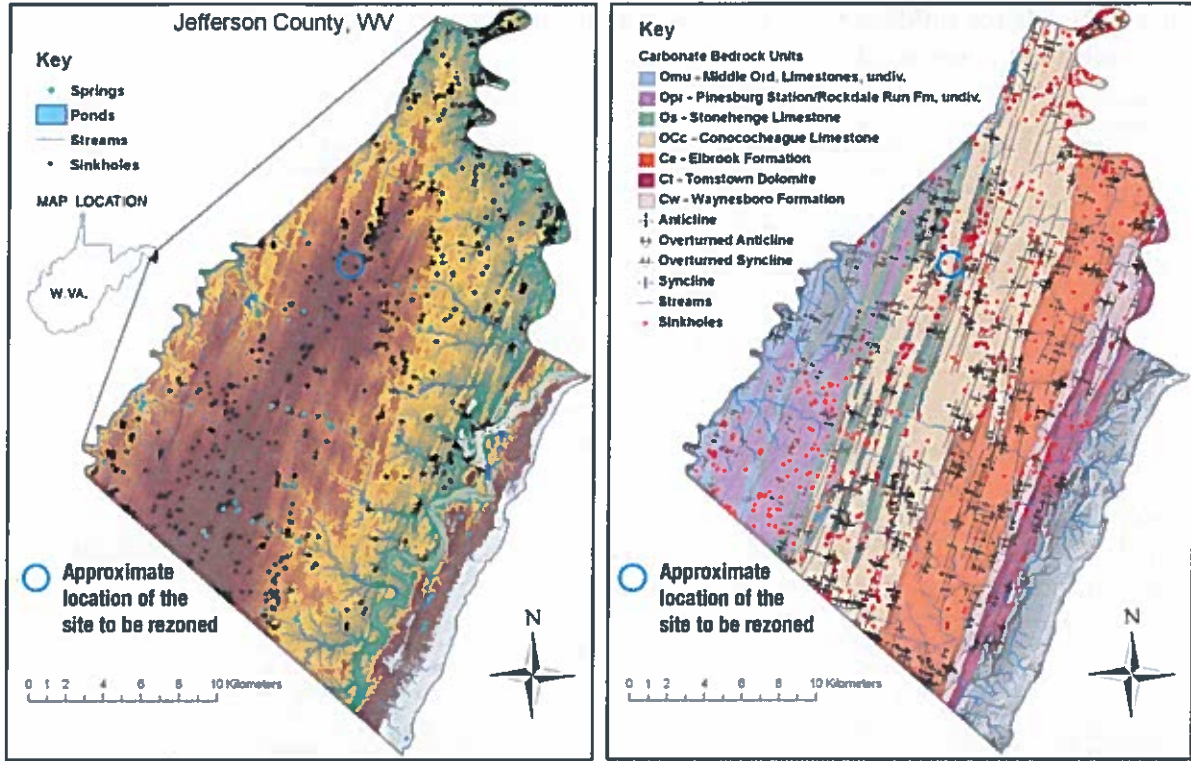
Ainsworth EA, Yendrek CR, Sitch S, Collins WJ, Emberson LD. The effects of tropospheric ozone on net primary productivity and implications for climate change. Annual review of plant biology. 2012 Jun 2;63:637-61.

Tariq M, Ali M, Shah ZJ. Characteristics of industrial effluents and their possible impacts on quality of underground water. Soil Environ. 2006 Jan 1;25(1):64-9.

Chauhan A, Joshi PC. Effect of ambient air pollutants on wheat and mustard crops growing in the vicinity of urban and industrial areas. New York Science Journal. 2010;3(2):52-60.

⁷⁸ Kozar MD, Hobba WA, Macy JA, Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area, US GEOLOGICAL SURVEY, 1991

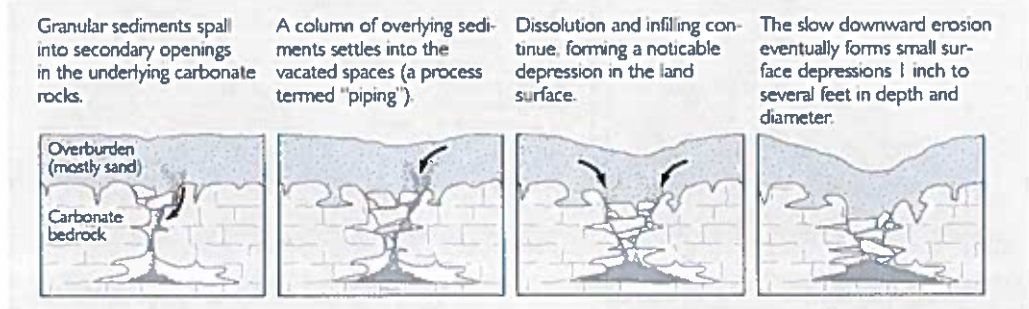
Figure 1:



Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Figure 2:

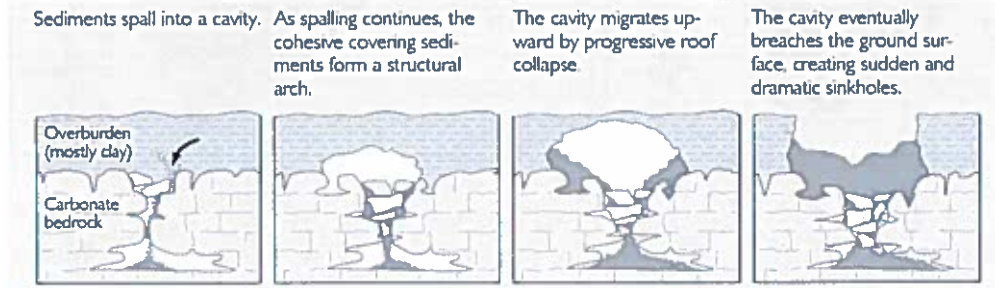
Cover-subsidence sinkholes tend to develop gradually where the covering sediments are permeable and contain sand.



In areas where cover material is thicker or sediments contain more clay, cover-subsidence sinkholes are relatively uncommon, are smaller, and may go undetected for long periods.

Cover-collapse sinkholes

may develop abruptly (over a period of hours) and cause catastrophic damages. They occur where the covering sediments contain a significant amount of clay.



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Figure 3:

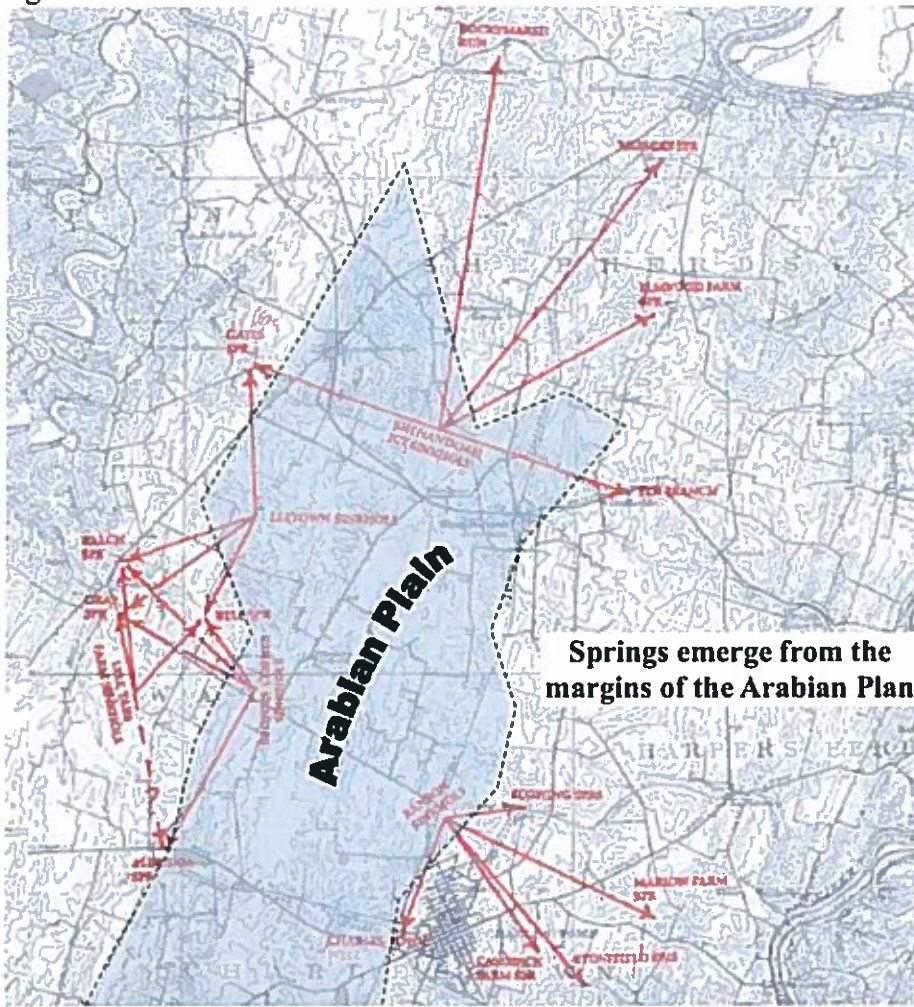


Figure 4:

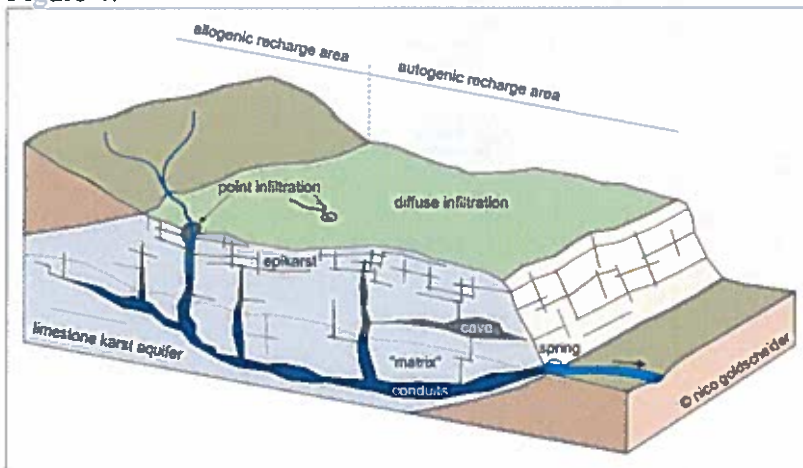


Figure 5:

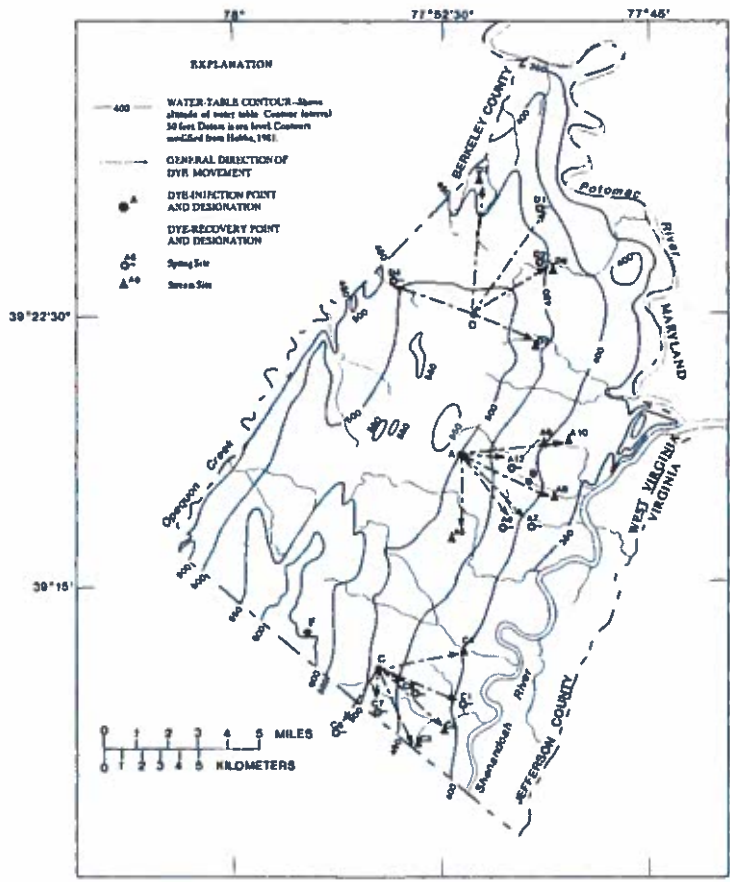
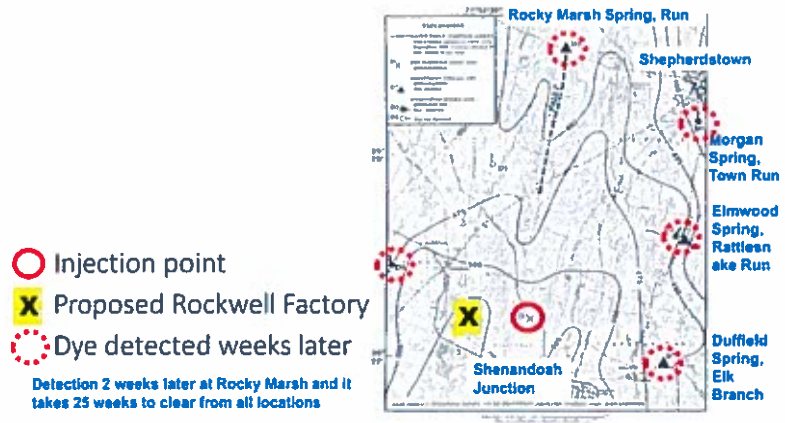
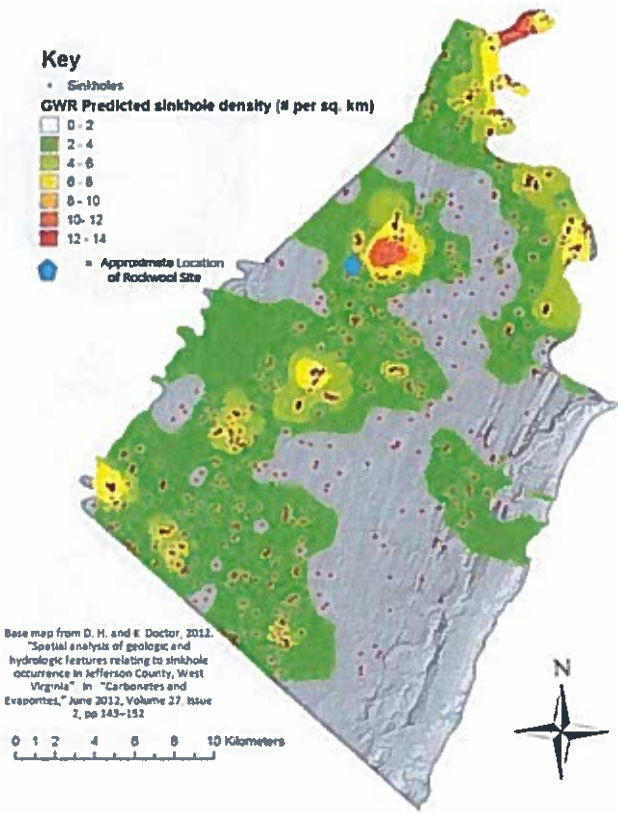


Figure 6:



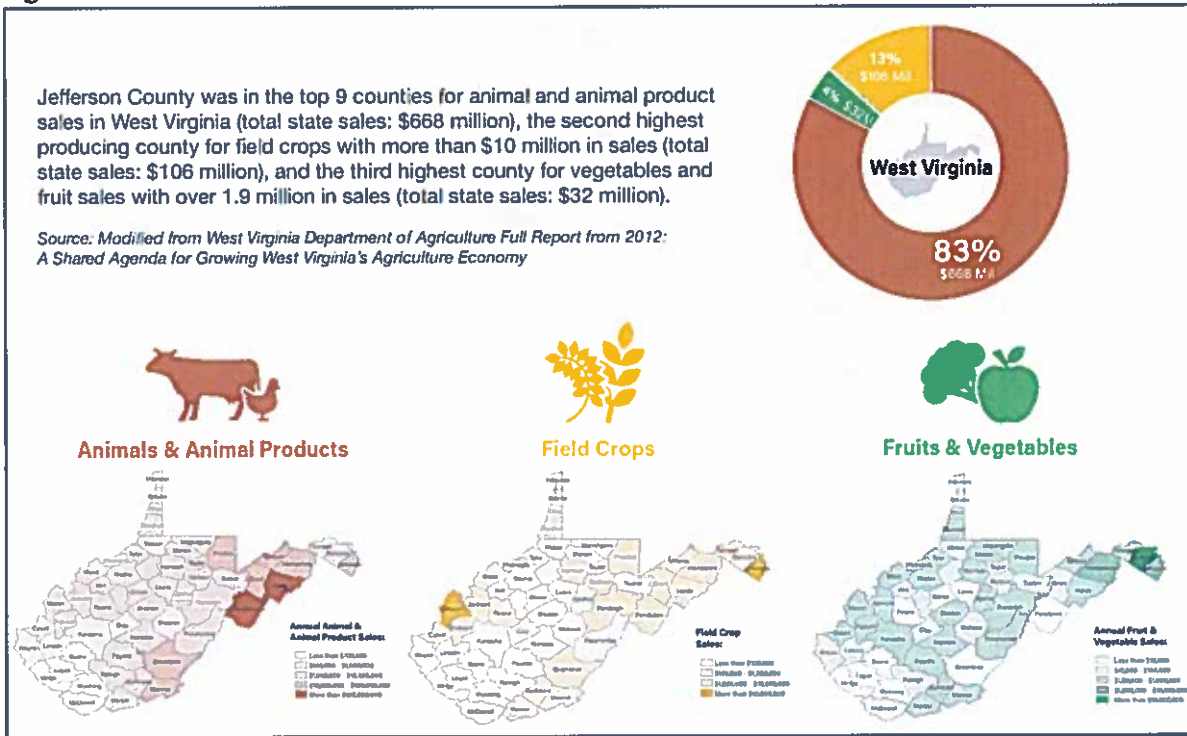
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Figure 7:



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Figure 8:



Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Jefferson County Foundation, Inc.

November 4, 2019

Director, Division of Water and Waste Management, WVDEP
 ATTENTION: Sharon Mullins, Permitting Section
 601 57th Street SE
 Charleston, WV 25304-2345
 Sharon.A.Mullins@WV.Gov

RE: Public Hearing/Notice No. SM-108-2019. Application Nos. WVR108876 reissue #2 and WVG611896.

Dear Director:

The Department of Environmental Protection should deny Rockwool requested permits because it is unable to operate its proposed business in a manner that protects the water resources of Jefferson County. For the reasons stated below, Rockwool has not demonstrated the competence or capability to comply with the various controlling regulations established to protect the water resources of the County, and thus the surrounding waterways. The failure of Rockwool to demonstrate the technical competence necessary to build and operate its facility is reason alone to deny the permits; or, in the alternative to modify the permits in a manner that requires Rockwool to take mitigating action to prevent groundwater and surface water contamination far beyond what it is doing now.

The issues identified below, as well as other information that has been provided to the DEP, raise serious issues not currently addressed by any DEP evaluation. The law requires that DEP consider and respond to all comments in a substantive manner, and we expect the DEP response to comprehensively address the issues raised below. Please note and take into consideration that a great majority of the people and agricultural businesses in Jefferson county depend on groundwater and cannot feasibly, for financial, logistical, and geographical reasons, switch to using treated water.

Finally, as discussed below, we believe that the DEP should hold an "evidentiary" hearing in Jefferson County in which the public is able to present the technical, expert, evidence about the existential threat posed to the water sources in Jefferson County. We have the evidence necessary to demonstrate that allowing Rockwool to operate here presents a risk that the DEP should not allow, and will create liabilities that West Virginia cannot bear. We believe that an evidentiary proceeding would be the most efficient and effective manner for the DEP to

PO Box 460, Ranson, WV 25438
 Jefferson County Foundation, Inc. is a 501(c)3 Non-Profit organization.

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determine whether Rockwool is able to operate its facilities in compliance with the controlling state and federal environmental regulations.

Comments on Permit Registration No. WVG611896, which allows operation under WV NPDES Permit No. WV0111457 Multi-Sector Stormwater General Permit.

Technical Comments on WVG611896

Hydrogeologic setting and associated vulnerability of groundwater resources:

Site selection and planning:

It has been well defined that the Rockwool's Ranson facility is sited on Karst geology¹. Despite this information being readily available, when originally permitting the Rockwool facility, the Site Selection Criteria (West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.10) were not followed. "Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s), subsidence, or delineated wellhead protection areas, as determined by the Bureau of Public Health. If areas of karst, wetlands, fault(s), subsidence, delineated wellhead protection areas or other areas determined by the director to be vulnerable based on geologic or hydrogeologic information, are determined to exist then the facility or activity design must adequately address the issues arising from locating in the area(s) of a potentially more vulnerable groundwater resource". This facility should never have been permitted on karst. Rockwool clearly did not describe an understanding of Karst in its original 2017 permit application.

Rockwool should be sited in a more appropriate location.

Karst aquifers are known to be "extremely vulnerable to pollution" due to direct connection between the surface and underlying high permeability aquifers². The groundwater at the Rockwool site is only 60 feet below the ground. Further Karst is known to have "severe ground instability problems"³. This puts buried utilities like sewer and gas lines at risk for damage or

¹ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. Field Guides. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In Sinkholes and the engineering and environmental impacts of karst 2008 (pp. 12-22).

² Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. Earth-Science Reviews. 2014 Nov 1;138:61-88.

Ford D, Williams PD. Karst hydrogeology and geomorphology. John Wiley & Sons; 2013 May 3.

Zhou W, Beck BF. Engineering issues on karst. In Karst management 2011 (pp. 9-45). Springer, Dordrecht.

³ Doerfliger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). Environmental Geology. 1999 Dec 1;39(2):165-76.

failure with subsequent ground or surface water contamination. This makes the “aquifer vulnerability” in karst areas very high⁴.

A simple peer reviewed literature search reveals a plethora of information highlighting the risks associated with development in karst geology and many techniques for studying the impact of development on such land. It does not appear as though the municipality of Ranson employed any of these methods when it incorporated or rezoned this area. However, this oversight or lack of due diligence by Ranson does not absolve the DEP of its responsibility and liability to protect the water resources. Such a search will also reveal many techniques and methods for designing best strategies for limiting risk in a Karst area. It does not appear as though Rockwool employed any of these techniques or guidelines. It seem catastrophic failure of a liner and the contents of the basins escaping into the groundwater resource maybe the only way that Rockwool will know a sinkhole has formed under one of its sediment basins.

It is clear that for decades now policy makers have been using “Aquifer Vulnerability” measures, of which Karst is very high, to set land use and water resource protection policy. The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document *Stormwater Management Design in Karst Areas* states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”

This development is clearly inappropriate for this location. Information to this effect is well rooted in the peer review literature and has been widely available for decades now. Why then would this industrial permit be approved? Rockwool should relocate in a more appropriate location where it is not such a risk to the water resources. Rockwool has clearly not demonstrated an understanding of the importance of the hydrogeologic setting and therefore at least the permit should be denied until it is more appropriately understood and addressed.

Sinkholes:

Karst geology is prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater.

The Rockwool site is located in the area with the largest sinkhole density in Jefferson County (see footnote 1). Furthermore, a study demonstrated that in this area, several factors increased the rate of sinkhole development and these included presence of surface water and development (see footnote 1). Again, the DEP guidance documents agree. The Chesapeake Bay karst stormwater guidance document, which WVDEP cites, clearly states that detention and retention ponds are not recommended on Karst. Again, quoting WVDEP’s own Karst guidance:

⁴ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

“attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Therefore, just by virtue of disturbing the ground on the site and creating ponds as Rockwool is seeking permit permission to maintain, Rockwool will actually increase the rate of sinkhole development.

As of this summer, there were at least 17 sinkholes on Rockwool’s site. Most of these sinkholes are inside of stormwater ponds, with seven sinkholes appearing in Rockwool’s rainwater reuse pond during construction. Rockwool was cited for failure to report a sinkhole, when the first sinkholes appeared in 2018.

The DEP approved Rockwool’s sinkhole mitigation procedure in 2018. First, the sinkhole mitigation procedure allows too much time to pass between the identification of a sinkhole and when it needs to be repaired – time that allows for possible drinking water contamination. The DEP should require reporting within hours of noting the sinkhole, and emergency intervention to happen within 24 hours. The DEP should directly oversee these repairs. Each sinkhole should be evaluated to ensure the optimal remediation procedure is employed⁵. There is no contingency for addressing any new sinkholes, which might open up, nor any discussion of inspecting swales, ditches or ponds related to the stormwater management to check for new sinkholes. Again it seems that the only way Rockwool will know they have a problem is when there is catastrophic failure. As mentioned above Rockwool should be required to have a multimodal detection system for sinkhole development.

In the IEP, Rockwool states, “due to the karst features underlying some of the property, voids and soil filled zones are located within some of the Limestone bedrock. A geotechnical survey conducted in 2017 identify karst anomalies within this property. Following the geotechnical survey and during construction, Rockwool identified and mitigated ten sinkholes on site reported to the WVDEP, as of June 21, 2019, shown on the attached Figure 2A. Rockwool prepared a supplemental Structure Sinkhole Repair document that was approved by the WVDEP to properly repair the sinkholes and mitigate potential contaminant pathways to groundwater. During construction, identified and located sinkholes were remediated following the procedure described in the supplemental sinkhole repair document, approved by WVDEP. The intention of repairwork was to minimize infiltration and additional solutioning.” With repeated mention of “WVDEP approval”, it is obvious that Rockwool is putting the liability with respect to sinkhole management on the DEP. Shockingly, this paragraph is the first mention of karst in the document. This statement is not even correct, as there were at least 17 sinkholes on site at this date.

⁵ Zeng Y, Zhou W. Sinkhole remedial alternative analysis on karst lands. Carbonates and Evaporites. 2019 Mar 5;34(1):159-73.

Zhou W, Lei M. Conceptual site models for sinkhole formation and remediation. Environmental earth sciences. 2017 Dec 1;76(24):818.

Huckert A, Garcin P, Villard P, Briançon L, Auray G. Experimental and numerical approaches of the design of geotextile-reinforced embankments prone to sinkholes. In 10th International Conference on Geosynthetics 2014 Sep 21 (Vol. 21).

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development and earth movement under such liners. In an effort to prevent disaster, Rockwool should be required to install the latest technology in and beneath the liners⁶. In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner stress given the risks associated with failure.

The DEP director can and should require Rockwool to perform routine groundwater monitoring. It is unacceptable that Rockwool has not included this in its plans. With regard specifically to outside material storage and disposal areas, and impoundments, for industrial facilities, West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that "Placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring," and "Groundwater monitoring stations may be necessary to assure protection of the groundwater resource." Given the information cited above about the sinkholes on site and our sensitive groundwater resources, DEP should require regular and frequent monitoring and reporting of groundwater.

Inappropriate storm water design for Karst geology:

In this section, Rockwool mentions 10 sinkholes were identified as of June 21, 2019, however, the number identified at that time was 17. Further they say, "the Level 1 Bioretention Areas are designed so that infiltration is not used." This needs to be clarified. These bioretention ponds are not noted to be lined so it is unclear what Rockwool is referring to when it says infiltration is not used. This needs to be addressed before this permit can be approved.

Topographic and Site Map:

The Multi-Sector General Permit requires a topographic map be provided that extends at least a mile beyond Rockwool's property that shows the following: all intakes and discharge structures, sinkholes, drinking water wells, springs, and surface water bodies. Rockwool's topographic map and site map are deficient. There are several of these features within one mile that are not shown, including known in use drinking water wells, sinkholes, and documented wetlands. Rockwool falsely claims there are no wetlands. Further, Rockwool only depicts 10 of the 17 documented sinkholes on its property and none beyond its property. Mountaineer Gas Company did an extensive Karst inventory of sinkholes prior to installing the natural gas pipeline and those sinkholes are also not discussed or depicted on any maps in the IEP or the General Permit application. Outlet #1 and #2 discharge to a field in the northern area of

⁶ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ. Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

Rockwool's property; it is unclear from the topographical map if there are sinkholes in this area. These deficiencies in the topographical and site maps must be corrected. Further, these deficiencies reflect a lack of respect for the neighboring community and resources.

Buried Utilities:

Rockwool failed to inventory and discuss its existing underground pipelines in the multi-sector general permit. Applicants are required to provide an inventory of all "operations, which may reasonably be expected to contaminate groundwater resources." The following potential sources are specifically listed: Outside materials storage areas, Disposal areas, Loading and unloading areas, Bulk storage and distribution areas, Drums, Sumps, Pumps, Tanks, Impoundments, Ditches, and Underground Pipelines. Rockwool specifically and falsely states that it has zero underground pipelines when, in fact, Rockwool has at least two underground pipelines, including a natural gas pipeline and a liquid oxygen pipeline.

The natural gas pipeline runs between the furnace side of the building and both the Sediment Pond and the Water Reuse Pond, within 10 feet of the stormwater discharge outlets. Rockwool's liquid oxygen runs from the oxygen tanks that sit immediately south of the Stormwater Detention Pond, under the perimeter road and on to the furnace building. This is not an inconsequential fact. As described above, due to the karst geology, these pipelines are at particular risk of damage leading to groundwater contamination or explosion and catastrophic damage. Underground oxygen piping is also particularly vulnerable to damage by lightning, which may ignite the pipe material.

Pipeline ruptures and explosions have occurred all too often as a result of the failure to monitor pipelines for corrosion or cracks. Rockwool has failed to identify any plans for pipeline monitoring. Such plans should be identified and included in any permit, and monitored by the DEP to ensure proper oversight and maintenance. The underground pipelines and their proximity to the Stormwater ponds and conveyances should be discussed in the IEP, as well as monitoring for corrosion and pipeline integrity.

Groundwater Protection Plan and monitoring:

A great majority of the households and agricultural businesses depend on groundwater. If the groundwater were to be fouled, it would devastate our equine and agricultural industry and therefore our economy. It would devastate our local government with restoration cost and legal cost as citizens seek restitution. It would be a major burden to households who will be forced to find alternate undoubtedly more expensive sources of water. We have seen this play out across our state as the unknown consequences of previous industrial and extractive activity came to bear. Here we have the chance to prevent it. We are counting on the DEP to protect the groundwater we depend on in Jefferson County.

The section of Rockwool's multi-sector application for groundwater data is woefully incomplete and demonstrates a cursory analysis of what is truly a foundational concern. The DEP guidelines for successful Groundwater Protection Plan lists the groundwater analysis, data and other related information that should be included. While Rockwool mentions it exist, it barely

addresses it. The plan requires “a discussion of all available information reasonably available to the facility of activity regarding existing groundwater quality at, or which may be affected by the site.” Previous groundwater data and monitoring are easily available from extensive USGS and county research, yet Rockwool doesn’t describe them. Rockwool also fails to describe the geophysical testing done in 2017. The narrative references groundwater data that are included in a table in the appendix, but the appendix section is incorrectly titled, the table has no descriptive text, and does not even label the units of measurement, rendering it useless.

As cited in the sinkhole section above, there are REAL studies that are applicable to the Rockwool site and sinkholes. A USGS study used dye tracer tests to determine rates and directions of groundwater flow within the karst aquifer. Dye was injected into a sinkhole in Shenandoah Junction, about a mile from Jefferson Orchards. Two weeks later the same dye was detected at a monitoring point north of Shepherdstown. Within 20 weeks, it was detected at an additional 5 sites between Kearneysville and Shepherdstown. The study reported movement of up to 840 feet per day – which indicates that contamination, can happen quickly. This sort of information is in fact “reasonably available to the facility” and should have been considered.

The director of the DEP can and should require Rockwool perform routine groundwater monitoring. It is reprehensible that Rockwool has not included this in its plans. West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that groundwater monitoring stations may be necessary to determine if contamination is occurring or has occurred, and also to “assure protection of the groundwater resource.” In section 4.9.c. it goes on to say, “new facilities shall monitor groundwater upon order of the director if the director reasonably believes that an industrial establishment or activity has the potential to contaminate groundwater.” Page 69 of the WVDEP stormwater management guidance document states, “monitoring wells and groundwater sampling may be required by the director for the assessment of the potential for or existence of groundwater contamination.” It is reasonable to believe Rockwool has the potential to contaminate groundwater, and monitoring for groundwater contamination should absolutely be required here. Given what we know about the sinkholes on site and our sensitive groundwater resources, and knowing that 70% of the people in this county drink well water, the DEP should require frequent monitoring and reporting of groundwater.

Gravel Surfaces:

Rockwool falsely claims to have zero graveled surfaces in the footprint of its drainage areas. There are clearly several areas on the site plan that depict gravel surfaces. Two significant ones include a pad near the sewer pump station and a one-acre, non-paved, non-vegetated, outdoor graveled area referred to as the “waste pit” or “melt for reuse” storage area (corresponds to Area B170 in the Air Permit). The waste pit or melt for reuse storage pad is particularly alarming as the things Rockwool plans to store here include, furnace tap out, melt for reuse, waste insulation, returned insulation, and dewatered Water Reuse Pond cleanout. If these items are stored for more than 180 days, Rockwool may need to apply for a RCRA Subtitle D industrial waste storage permit. These unlined areas are susceptible to infiltration and pose a risk to both groundwater and surface water. These areas have not been evaluated and IEP must discuss

these areas and the storage of waste products, by-products, and materials destined to be recycled.

Process wastewater illegally allowed in Outlet #2:

Storm water that runs off site B170 waste pit or melt for reuse area that is described in the above section will go to Bio-retention Basin #2 via a perimeter ditch and then to outlet #2. This water is not stormwater; it will actually be process wastewater. West Virginia Legislative Code §47-10-2.41 defines “process wastewater” to mean any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. As described in the above section, site B170 will contain water and materials that have contacted it processes, and come in contact with the aforementioned products. Discharge of anything other than stormwater is prohibited from outlets. Therefore this is an illegal discharge and should not be allowed.

The Water Reuse Pond is not a stormwater structure:

Rockwool states that “filter backwash” and “heat” water will go to the Water Reuse Pond. Rockwool claims the Water Reuse Pond is a stormwater management structure. However, “filter backwash” and “heat” are considered pollutants by the EPA (40 CFR 122.2). Therefore, these materials are process-related industrial pollutants. Further, the pipe that carries these materials to this pond must be treated as a point source of industrial effluent and regulated as an outlet. Rockwool describes in the IEP that runoff from to this pond could, “contain dust from handling of raw materials for the melting process, which would include solid materials such as stones, slags and melt for reuse items,” and this pond could receive sprinkler system drainage from inside the binder storage building. By design, the pond has no outlet for overflow. During construction, 7 sinkholes formed inside of this pond. It is now designed to have a triple liner to prevent further infiltration to groundwater. So, with no outlet and a liner, this is actually a pool, and by Rockwool’s own admission, it may contain more than just rainwater. This pond cannot be classified as simply a stormwater management structure. This pond must have threshold-monitoring requirements with routine sampling of the contents.

The IEP describes how this pool is sized for a 100-year rain event, and in the event that it is approaching capacity due to a large storm event, Rockwool can store and treat the water. “For example, RAN5 could employ water tank trucks to haul off water to be treated at a designated publicly owned treatment works.” It is unclear which POTW they are referring to. If it is Charles Town, this should have been described in the NPDES modification that was approved on March 1, 2019. Since it was not described, it should not be allowed by the Charles Town Utility Board (CTUB). This is too serious a risk to not be specifically addressed. Rockwool must amend its application to identify what is the trigger for the preparation for a “heavy rain event,” where are the water tank trucks going to come from, if the trucks are contracted how will Rockwool ensure that they are actually available when needed, how will it ensure that the drivers and operators of these water tank trucks are actually properly qualified to be handling contaminated water, and most importantly where will these trucks dispose of the contaminated water? What location has agreed to take such water?

Rockwool should be required to test the contents of each tanker truck before it is hauled away, to ensure no hazardous materials are mixed with rainwater, and that the trucks are not then contaminated for further water hauling. This should be further evaluated and well defined in the Rockwool permit application.

Potable water used for Fire protection is admixed with stormwater:

The Multi-sector General Permit has a pure prohibition of non-stormwater discharges. The discharge water that Rockwool seeks permit coverage for contains a significant volume of treated well-water (potable water), supplied by Jefferson Utilities Inc. (JUI), that will be used for fire protection. Rockwool's site plan (approved by the City of Ranson) calls for a fire protection water line, supplied entirely by potable water. Rockwool's Industrial User NPDES permit, issued to the Charles Town Utility Board (CTUB) on March 1, 2019 (WV0022349), the potable water flow for fire suppression will be 75,268 gallons per day. This is a significant amount of water and well water used for fire suppression is not stormwater. Yet, the water from fire line flushing, training, and actual fire fighting would flow through all three of the drainage areas, and would convey to all four stormwater management structures. Rockwool must thoroughly and appropriately characterize how the potable water discharges related to fire protection will be handled so that it does not mix with stormwater. The permit must be modified to address this important issue. .

Rockwool's IEP fails to identify all of outdoor process activities:

According to Rockwool's air permit (R14-0037) describes a "melting furnace portable crusher" as an outdoor process. This process is a significant source of dust and fugitive particulate matter, third only to the two steam stacks. This process is planned at least quarterly. The air permit describes this process as occurring in a dedicated area that is uncovered and unpaved, B170. Therefore, B170 is also a materials processing area in addition to a storage area for process-related industrial pollutants as described in a previous section. Again, this area is uncovered, unlined, and about 20 feet from the Water Reuse Pond and Bioretention Basin #2. This outdoor process must be considered in the IEP.

IEP fails to address the potential for dust and particulate contamination of stormwater discharges:

Rockwool will produce fugitive dust and particulates that may contain formaldehyde, menthol, phenol, silane coupling agents, and other hazardous substances. Several processes generate fugitive dust, including the portable crusher operation mentioned in the previous section. This process is entirely uncontained and uncontrolled by any pollution control devices. In addition, Rockwool's controlled processes will produce up to 134 annual tons of PM2.5 and 154 annual tons of PM10. Air modeling suggests that the bulk of the dust and particulates will fall out within Rockwool's drainage and be deposited on building roofs, asphalt surfaces, parking lots, roads, and vegetation. The stormwater, which falls on these surfaces, will capture the dust and hazardous particulates contained within and convey them to the stormwater and bioretention ponds and outlets. As a consequence of the toxic nature of the underlying contaminants, these captured contaminants have the potential to negatively impact groundwater and surface water.

The effect on water resources has not been evaluated and needs to be addressed before this permit is approved.

Internal plumbing plans should be included in the application:

The IEP shows that the Stormwater Management Pond that drains areas HrC and HeB, which covers parts of the manufacturing facility, discharges to a field north of Rockwool through Outlet #1. This Outlet #1 is expected to have discharge of 86,330 gallons per day. Is all this water in fact stormwater? Further in section 4.4.7 of the IEP it states, “no interior building floor drain is designed for connection to the storm drain system.” Does this mean it will not connect or it may inadvertently even though it is not “designed” to do so? This should be clarified. It continues in this section to say that “floor drains in office space, bathrooms, and other areas are directed through the sanitary sewer to Charles Town WWTP.” These “other areas” need to be clarified to determine where the other areas are and where they discharge. It is unknown if these “other areas” include process area floor drains and if these drain to the Charles Town WWTP. The DEP must require that the application contain the internal plumbing plans, to determine that no process water from the facility is expected to be discharged into ponds with a discharge to the natural environment. No permit should be issue until this matter is specifically resolved.

Storage of unknown chemical in close proximity to water rescors:

Seven of the 13 Aboveground Storage Tanks (AST) on site have undisclosed contents and hold 88,500 gallons of unknown chemicals. If the contents of the ASTs are unknown, there is no way to determine if the ASTs are in compliance with 47 CSR 63 (AST Design Construction and Installation), or if proper and adequate containment is provided. It is impossible to evaluate the application for adequate groundwater protection water recourses absent this information. Further, it is reckless to allow unknown industrial chemicals this near stormwater ponds, sinkholes, and water supply protection zones on karst geology.

Additionally, there is no information provided about Rockwool’s plans to monitor and ensure tank integrity. The risk of corrosion, leaks, and vapor releases from storage tanks has resulted in multiple disasters in this country. Rockwool’s permit application must include its plans for tank integrity inspection.

If there were a spill, the public utility leaders would need to know the contents immediately. This information needs to be on file so an appropriate plan can be made before it is an emergency situation. Disclosure of the contents of these ASTs is imperative, required by statute, and should be part of the permit. Until this information is included with specificity the permit should be denied.

Substantial Harm Determination:

The Rockwool Facility is located such that any toxic release to groundwater or surface water form the facility would shut down at least one public water supply and should therefore be classified with a Substantial Harm Determination. Harpers Ferry sources their drinking water from Elk Run, Jefferson Utilities Inc. from the aquifer, and Shepherdstown from Rocky Marsh

Run. Additionally, there are thousands of households, businesses, and farms that source their drinking water for humans and animals from private wells in the aquifer. As discussed in the karst section of this document, the aquifer is contiguous over a long area of the county and the flow rate of the aquifer is rapid. A Substantial Harm Determination would require some relevant safeguards be in place.

Waste material usage:

Rockwool states, "No wastes or waste materials are used for deicing, fills, or any other uses on site unless provided for in an existing rule." The 'existing rule' needs to be further defined so that it can be determined what material is being used for what. The permit should not be approved until this is done.

Inappropriate Facility Design, Control, and Operations:

This sections states, "storage of solid waste or recycled material is constructed with an appropriate concrete surface that is chemically resistant to waste or recycled material. Liquid is not stored in designated solid waste or recycled material areas and containers that are outside have cover lids. The collection system is connected to the process water system and does not discharge to the stormwater outfall."

The solid waste area needs to be lined, in addition to a 'concrete surface that is chemically resistant.' DEP guidance for stormwater controls says it **requires** "the employment of mitigating practices to eliminate potential contaminants from reaching the stormwater structure." Although the rainwater reuse pond is lined, there is still a risk of groundwater contamination via this structure, as there are 7 sinkholes under the pond already. Therefore, more needs to be done to prevent waste products reaching the rainwater reuse pond.

Also, the gravel pit discussed earlier and labeled "waste pit" or "melt for reuse" storage area will also contain waste and it is also unlined. However, this will come into contact with liquid as it is uncovered and is the destination for dewatered sludge form other ponds. These areas have not been evaluated and they must be addressed along with the storage of waste products, by-products, and materials destined to be recycled. It is possible the RCRA should apply here. The permit should not be approved until this issue is specifically addressed, including an analysis of whether RCRA applies to these activities; and, if so, whether proper regulatory action has been taken.

Inappropriate description of ponds and site runoff design:

Rockwool states, "the outfall discharges water onto an outlet apron during discharge to maintain non-erosive discharge velocities." The outfall apron needs to be better described and monitoring parameters with action trigger points need to be defined to prevent erosion and sinkhole formation. Rockwool further states in this section, "for construction activities that will disturb the soil, appropriate notifications or applications are made to the WVDEP and Jefferson County to ensure compliance with local and state requirements. The site is currently continuing construction under approved West Virginia Construction General Storm water Permit, WV 108876." This is already inaccurate and not being followed. Rockwool did not apply for

coverage under the statewide stormwater construction permit in a timely manner, and has been operating without coverage. This fact must be taken into consideration when making final decisions regarding the trustworthiness and reliability of Rockwool.

Administrative Comments on WVG611896:

There are also administrative reasons that the permits should not be approved. The Multi-sector permit is for post-construction activities and should not be authorized until all construction is complete. At this time, the construction permits have not even been completed. A version of Rockwool's Multi-sector permit was released by DEP to WV Rivers Coalition on October 21, 2019. The PDF contains the word "draft" but the document itself is not stamped draft. A letter, which was not dated, that was sent from DEP to Rockwool says that the permit has already been approved. This coupled with the PDF not being stamped is concerning because the public comment process is not even finished. If the permit was actually approved prior to the public comment period being completed and the issues raised by the public resolved, that would be a violation of the process for granting the permit. Please explain whether this permit was actually already granted, and by whom? If not granted, please explain the letter.

Further the State-wide Multi-sector permit was just renewed on October 12, 2019. This most recently approved version is more protective of the environment and people than was the previous iteration and therefore requires companies like Rockwool to be more vigilant and responsible. Is this why Rockwool's Multi-sector permit was effective on October 12 under the previous iteration of the state wide multi-sector permit that is less onerous and far less protective of our environment and our drinking water? We expect an explanation for the date of issuance, and whether the approval in accordance with the previous Multi-sector permit regulations was actually granted prior to this process being completed. We believe that this may give rise to a legal challenge on the validity of the permit.

Rockwool is a new facility, is not yet operational, and has not submitted a correct or complete application as of yet. The Draft Permit Registration should be corrected to reflect Rockwool's potential operation under the 2019 WVDEP EPA-approved WV NPDES Permit No. WV0111457. However, we believe that when and if Rockwool is able to submit a complete and accurate application that is truly sufficient to protect our ground and surface water recourse, this should be an Individual WV/NPDES Water Pollution Control Permit and not a Registration under Permit No. WV0111457. We believe that under 47 CSR 10 Section 13.6.B.2.a that the WVDEP director should require Rockwool to maintain this separate permit that will provide more protection to our groundwater resources.

Inappropriate Signatory:

In section 4.6, it states "4.6.a.1.A. A president, secretary, treasurer or vice-president of the corporation in charge of a principle business function or any other person who performs similar policy or decision making functions for the corporation; or 4.6.a.1.B. The manager of one (1) or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars

(\$25,000,000), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.” The IEP is signed by Mark Graves; to our knowledge, he does not qualify as a signatory. This is significant, because the permit may have been more accurate if one of the above-mentioned individuals had signed it under penalty.

Public Comment on Roxul’s Permit Registration No. WVR108876 Reissue #2 for Coverage Under the General WV/NPDES Water Pollution Control Permit No. WV0115924

Technical Comments on WVR108876 reissue #2:

Inaccurate limit of disturbance:

According to Deed Book 1197 Image 672 Section C, Section D and Section 2, Rockwool was granted a 5.7 acre construction easement. This acreage should be included in the limit of disturbance (LOD). This would take the LOD to 104.5 acres, triggering the requirements for LOD greater than 100 acres. This is a material and substantial alteration and addition to the permitted facility that is not represented in the existing permit. As required under 47 CSR 10, Section 9.2.b in accordance with Section 10 and the public notice procedures of Section 12, should this information have been reported when it was finalized on October 25, 2019, and should this permit application be revised to reflect this addition?

In addition, defined in the DEP LOD rules, “disturbed area” should include the Water Line, Gas Line, and Planned Sewer Line disturbances that occurred on Rockwool property must also be considered part of Rockwool’s LOD. Further, the previously submitted soil maps in the original 2018 approval of WVR108876 suggest the LOD, based on soil type, to be greater than 100 acres.

These facts have not been taken into consideration in connection with the Permit Reissue and must be prior to any final issuance.

Sinkholes:

Sinkholes, as noted above in the technical comments for the multi-sector permit, are a significant concern as they lead to direct contact of ground water with surface water and any contaminant that surface water may carry. Rockwool doesn’t seem to appreciate or understand this issue. . On July 19, 2019 a DEP permit reviewer requested additional information, “Sinkholes. Include table or color code to denote status of sinkholes.” Rockwool failed to respond in either the application or the draft. The locations of 10 sinkholes are noted, but there are 17 documented sinkholes.

There is no information about current mitigation status of currently documented sinkholes, contingency for addressing any new sinkholes or of detection strategies for new sinkholes in swales, ditches or ponds related to the stormwater management. Under this permit, the only way that Rockwool will know a sinkhole has formed under its sediment basins is when

catastrophic failure of the liner occurs and the contents of the basins escaped into the groundwater resource. This is completely unacceptable.

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development and earth movement under such liners, in an effort to prevent disaster. Rockwool should be required to install the latest technology in and beneath the liners⁷. In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner stress given the rinks associated with failure.

Receiving Stream:

The receiving stream is again listed incorrectly as Elk Run. Again, the correct stream is Rocky Marsh Run, as is noted on DEP's inspection reports for Rockwool. Naming the right stream is not difficult to do! Yet this is not an inconsequential matter. In fact, it is critical. Understanding the watershed is central to these permits because the whole point of these permits is to protect the water resources!

Inappropriate and ill-defined flows:

Rockwool claims that Outlet 1 will have 86,330 gallons of stormwater flow per day and Outlet 2 will have 10,207 gallons of stormwater flow per day for a sum of 96,537 gallons of stormwater per day. Oddly, this seems high; more peculiar still is that it is nearly equal to Rockwool's average projected industrial wastewater discharge volume of 97,650 gallons per day, as obtained from a flow diagram to the Charles Town Utility Board for their NPDES permit (WV0022349) modification. Why are these numbers so high and what is the significance of the similarity?

Public Notice Sign:

The permit required signage at the site is and has been incorrect since it was installed. It has the incorrect date and was originally installed in the incorrect location. This needs to be addressed prior to the issuance of any permit.

Unresponsiveness to Technical Requirement of Outlet Design:

Velocity dissipation devices are required by the General Permit for the two designated outlets, to limit erosion and sinkhole formation. However, Rockwool's Sediment & Erosion Control Plan only calls for a "flow spreader" (Appendix B, Figure 2). This is inadequate to meet the General

⁷ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ. Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

Permit requirements and will not protect against erosion. The General Permit requires "Outlet protection from a pond, waterway, diversion or culvert must extend as a properly stabilized waterway to a natural stable waterway." The outlets are depicted as discharging to an open field. This open field will not act as a natural stable waterway in this karst environment, especially with the potential discharge of 96,537 gallons per day.

This issue must be addressed prior to the issuance or reissuance of any applicable permit.

Administrative Comments on WVR108876 reissue #2:

The public has not been given information to understand which version of the statewide stormwater construction permit Rockwool would be authorized under. The first "2019" version, EPA approved and was effective February 9 of this year, was challenged by some industry groups, and the resulting settlement produced major changes which weakened the permit. Those changes are still pending, because the EPA has not yet approved the revised permit. Which version of the 2019 statewide permit will Rockwool be authorized under? The first version, or the version with substantial changes? The permit should not be approved until this is made known to the public and the public is given time to comment.

Rockwool did not apply in a timely manner for the new 2019 permit and is currently operating without a permit. The 2012 permit it had been authorized under has expired. Again, DEP has not answered our direct questions about this. Any discharges that Rockwool is generating at this time, may be unauthorized and in violation of the Clean Water Act. This kind of flagrant disregard for the rules is unacceptable.

Rockwool began an application process to re-issue its stormwater construction permit in the fall of 2018, but withdrew it for unknown reasons. In November 2018, Rockwool went over one year in construction, and had substantial changes due to sinkhole remediation, yet DEP allowed them to operate without completing the application for re-issue.

Rockwool should be required to stop construction until this current application is approved. DEP stormwater management guidance document notes that groundwater protection plans need to be in place BEFORE stormwater structures are built.

Comments on Rockwool's Competence and Character for both WVG611896 and WVR108876 reissue #2:

We believe that as career officials and environmentalists, you care about the environment and both how that environment affects quality of life and public health, as well as how human activity and industry affect the environment. For its part, Rockwool has shown from site selection to the careless and the downright negligent way that it has produced applications and

conducted itself, that it has no such respect or care for our environment, our health, or our way of life. As we have highlighted, this is an abhorrently inappropriate location for such an installation and the current iteration of the permits do not go nearly far enough to protect the environment or the public. Further, the level of errors and misrepresentations in every permit Rockwool has submitted and its inability to comply with those permits demonstrates either sheer incompetence or intentional misrepresentation and negligence or both. We want to highlight a few of the many errors, incorrect information, and sloppy report preparation over several permits that call into question Rockwool's ability to hold a permit and operate in accordance with laws and regulations. Attached is a more extensive but not exhaustive list.

In its 2017 application for stormwater construction, Rockwool named the wrong receiving stream on its permit application. The correct receiving stream is Rocky Marsh Run. A year later, Rockwool continues to be inconsistent about this simple fact, using six different incorrect stream names. Sometimes, it correctly names Rocky Marsh Run, in other places, it names other streams, including Shaw Run, unnamed tributary to Elk Run, Pikeside Channel, Cold Spring Run, Opequon Creek, and Evitts Run. Naming the right stream is not difficult to do! This is not an inconsequential matter. In fact, it is critical. Understanding the watershed is central to these permits, because the whole point of these permits is to protect the water resources!

On its multi-sector permit application, Rockwool indicated that its two stormwater outflows were going to be discharged to Evitts Run, which is incorrect, as we just noted. Rockwool also said stormwater was going to the city of Charles Town stormwater management system, which doesn't even exist! At DEP's request, Rockwool has since fixed this error, but it is such a glaring error that one has to ask: was this incompetence or intentional? Again, the correct stream is Rocky Marsh Run. This is important because this stream is in the source water zone for Shepherdstown's water supply! Even more disturbing is that Rockwool does not include the nearby source water protection area for Shepherdstown in its Spill Prevention, Control, and Countermeasure plan. This is alarming because as the receiving stream Rocky Marsh Run and therefore Shepherdstown's water would clearly be affected by a spill. This demonstrates a disregard and carelessness toward the effect they will have on the local water resources.

On permit applications, Rockwool has repeatedly given construction timelines that were many months to years shorter than was actually needed. Rockwool has repeatedly failed to check the box on its applications for "Grading period to exceed 1 year" and sign the associated statement for billing for public notice. This was not simply poor estimation as on the first stormwater construction permit reissue Rockwool responded to application section 10 entitled *Estimated Start and Completion Dates for Project*: "Start: October 2, 2017 Completion: September 2019" This was over 1 year, yet the checkbox was not marked. In May of this year, Rockwool requested and had a termination inspection for its stormwater construction permit. It was clearly not finished site work at that time. The termination was denied for this fact. But what prompted this termination inspection? Was it done in good faith? This demonstrates a general disregard for the requirements and standards.

Rockwool has already been cited for six types of non-compliance of its stormwater construction permit including failure to report a sinkhole. This is deeply troubling because sinkholes are precisely the thing that could have a catastrophic effect on our groundwater and surface water resources. This failure to comply demonstrates either an unacceptable level of incompetence or a disregard for the requirements that rises to the level of malfeasants.

These permits should not be approved and we ask that under 47 CSR 10 Section 13.6.B.2.a that the WVDEP director should require Rockwool to be approved for and maintain an individual WV/NPDES Water Pollution Control Permit and not a Registration under Permit No. WV0111457.

Request for an Evidentiary Hearing for WVR108876 reissue #2 and WVG611896:

Environmental regulations are based on the premise that Permittees, such as Rockwool, operate in accordance with the rules and regulations that have been established to protect the public from environmental contamination and degradation, Rockwool has a duty to comply with all conditions applicable to all permits. WV 47 CSR 10-5.1 To this end there is a relatively complicated and integrated environmental protections regulatory scheme that is supposed to provide that protection, and it is effectively dependent upon voluntary compliance and truthfulness.

It is not possible for the government to be present at every potentially hazardous or contaminating event – every time a worker opens a valve to discharge hazardous chemicals or polluted process water, or every time there is manufacturing malfunction. So, industry is supposed to comply with the laws and follow the requirements of the permits that govern their activities. The Statute clearly states, “The permittee must comply with all conditions of this permit.” WV 47 CSR 10-5.1.(a) In order to comply, a company must be both competent to operate in accordance with those rules and requirements and have the character and integrity to be honest about the inevitable malfunctions, unknown human errors, and unanticipated events that pose a risk to the public.

Rockwool has not demonstrated either the character or competence to be given the permits that it seeks to operate in Jefferson County. As noted throughout this submission, it has provided inadequate, incomplete, inaccurate and misleading information upon which it requests approval for the DEP. Where, as here, Rockwool has failed to “disclose fully all relevant facts, or the permittees misrepresentation of any relevant facts at any time” the Permit may be Suspended or Revoked. WV 47 CSR 10-9.4.a. Rockwool has done just that and provided inaccurate, incomplete and deceptive information designed to frustrate the attempts of the DEP to review and understand its plans and processes. The DEP is a resource stressed organization, with only a few professionals to evaluate the permits, and legions of lawyers from Rockwool to pressure DEP to approve its permits regardless of the information provided.

DEP operates its program under an Agreement with the federal Environmental Protection Agency (EPA), and all applications for permits under the National Pollutant Discharge Elimination System (NPDES) Program must meet the requirements of the EPA approved process. WV Code 47 §47-10-2.3, and the federal Clean Water Act §307, 308, 402, and 405.

As you know, any permit issued “may be revoked, suspended, revoked and reissued, or modified during its terms for causes as set forth in Section 9...” WV Code 47-10-3.4. In addition, where as here, there are conditions of the permit that do not provide for compliance with the applicable requirements of the federal Clean Water Act and the State Acts, no permit should issue at all. WV Code 47 §3.6 (a). So, for example, all of the issues raised above regarding the Karst geology and the risk posed for groundwater contamination have not been adequately addressed and Rockwool can not comply with the requirements of the federal Clean Water Act or state regulations. This is a serious issue that, in its present configuration, make compliance virtually impossible. Additionally, various risk factors identified above, have not adequately been explained, such as the unspecified and undesignated water tankers removing contaminated pond water in a heavy rain event. This, and other issues, confirm that no permits should be issued to Rockwool until adequately and completely addressed. Rockwool has also demonstrated that it does not have the character to be trusted to provide truthful information upon which the department can rely. Although Rockwool’s Vice President Kenneth Cammarato signed the Construction Stormwater Permit application, under the penalty of fine and imprisonment for submitted false information, 47 CSR 4.6 (d), there are several places in the submittal that contain demonstrably false information. As described above, and in other comments, the size of the “limits of disturbance” is the relative timeline for sediment disturbance. Originally, in 2017, the representation was for a mere 21 weeks, now we are already at 10 months of earthwork. See, other comments submitted for additional information on inaccurate and incomplete information regarding the length of time for the grading phase of construction, the size of the area being developed, i.e., more than 100 acres.

For all of these reasons, the citizens of Jefferson County suggest that merely submitted public comment to the Agency for review is inadequate to demonstrate the Rockwool should be granted the permits it seeks. Under the federal Clean Water Act, and other federal statutes, the state of West Virginia must demonstrate that it is able to investigate, review and then monitor any environmental permit that is issued. That it cannot do, and we request that in acknowledgement that the public in this case is more equipped to provide expert review and assessment of the permit applications that apply to our land and our water. We request that we be provided the opportunity to present such expertise at an evidentiary hearing where DEP is able to accept testimony from environmental experts on the reasons that the Rockwool should not be allowed to operate its facility in the location it is building on, hear Rockwool’s answers and explanations and make a determination after the receipt of such expert opinions and analysis. While not provided for by statute, it is also not prohibited by statute, and the Director has the full discretion to grant this request. WV 47 CSR 10 -5.8 “Duty to Provide Information,” requires that the permittee shall furnish to the Director “any information that the Director may request to determine whether cause exists for modifying, revoking, and reissuing, suspended, or revoking this permit or to determine compliance with this permit.” In this case,

the Director could require Rockwool to participate in an evidentiary hearing process as part of the permitting application and, upon receipt of the expert testimony and information provided to the DEP by the public, require Rockwool to respond to the information. Thus, making a decision, based on facts and evidence that challenges the inaccurate and incomplete information which Rockwool has submitted.

Best Regards,



Christine L Wimer MS, DVM, DACVS-LA
President, Jefferson County Foundation, Inc.

Enclosure: List of Permit Errors and Inaccuracies

Jefferson County Foundation, Inc.

January 26, 2020

The Honorable Austin Caperton
 Secretary of the West Virginia Department of Environmental Protection
 601 57th Street, SE
 Charleston, WV 25304

Re: Industrial Stormwater Permit Application No. WVG611896

Dear Secretary Caperton,

Jefferson County Foundation respectfully submits the following comments on Rockwool's Multi-Sector Industrial Stormwater Permit Application No. WVG611896 and petitions the West Virginia Department of Environmental Protection (WVDEP) pursuant to West Virginia Legislative Rule 47CSR10 Section 13.6.b.2.A to require Rockwool to obtain a valid individual permit so that appropriate protections and oversight can be applied by the WVDEP to address all of the unique concerns the Rockwool facility poses. Among the reasons the WVDEP should grant our petition are that:

- Rockwool is a significant contributor of pollution and as such should be required to obtain an individual permit.
- Rockwool's facility is being located in a hydrogeologic setting with vulnerable groundwater resources, which can only be protected via the careful and tailored use of protective measures able to be imposed via an individual permit.
- Rockwool plans novel methods that are unlike those used in other mineral wool facilities in West Virginia and thus an individual permit is needed to appropriately protect the waters of the state.
- 11 other specific concerns have been identified that require an individual permit to be adequately addressed.

In support of this petition, below we provide a detailed explanation of our concerns.

1. Rockwool is a significant contributor of pollution and should be required to obtain an individual permit. (47CSR10 Section 13.6.b.2.A.1)

The Rockwool facility in Ranson, West Virginia will produce significant amounts of pollution in Jefferson County, West Virginia and the surrounding area. This pollution will endanger waters of the state including the groundwater and surface water resources of Jefferson County which are particularly vulnerable due to the hydrogeologic setting. The Rockwool facility's planned

PO Box 460, Ranson, WV 25438
 Jefferson County Foundation, Inc. is a 501(c)3 Non-Profit organization.

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

activities threaten the drinking water of tens of thousands of people in Jefferson County, Maryland, and Northern Virginia as well as the water quality of the Chesapeake Bay.

For example, Rockwool plans to release pollutants to the air which will fall to the ground and threaten local waters. Rockwool’s air permit to construct a stone wool insulation manufacturing plant (R14-0037, April 30, 2018), issued by WVDEP’s Division of Air Quality, allows for Particulate Matter less than 2.5 microns, 133.41 tons per year (TPY); Particulate Matter less than 10 microns, 153.19 TPY; (total) Particulate Matter, 250.87 Tons Per Year; Sulfur Dioxide, 147.45 TPY; Oxides of Nitrogen, 238.96 TPY; Carbon Monoxide, 71.40 TPY; Volatile Organic Compounds, 471.41 TPY; Sulfuric Acid Mist, 16.37 TPY; Total Hazardous Air Pollutants, 392.59 TPY, Greenhouse Gases (CO₂e), 152,935 TPY, and classifies the Rockwool Ranson site as a Major Stationary Source of air pollution subject to New Source Review and Prevention of Significant Deterioration (PSD).

Rockwool’s air modeling suggests that the bulk of the dust and particulates will fall out and be deposited within the plant boundaries on building roofs, asphalt surfaces, parking lots, roads, and vegetated areas within Rockwool’s drainage¹. For example, the PSD modeling result is that the Significant Impact Area for PM₁₀ maximum concentrations is within a circle, centered on the facility, and extending only 0.45 miles to 0.78 miles. That means the majority of the PM₁₀ will fall within the fenced portion of the plant, as can be seen in Exhibit A, in which the AERMOD modeling runs show the spatial concentration distribution of pollutants that exceed the Significant Impact Level (SIL) for PM₁₀ at the 24-hour NAAQS standard (exhibit A1) and the annual NAAQS standard (exhibit A2). The modeling runs show that the maximum PM₁₀ concentrations (in ug/m³) will occur almost entirely within the outlines of the Rockwool facility². This indicates that, by mass, there will be significant outfall of PM₁₀ pollutants on the drainage areas going to the two sediment ponds. Stormwater that falls on these surfaces will entrain the hazardous particulates and dust and convey them to the stormwater and bioretention ponds and outlets. In the case of Rockwool these particulates and dust are in fact hazardous.³ Entrained particulates and dust—due to the toxic nature of the underlying contaminants—has the potential to negatively impact groundwater and surface water. As stated on their application for Multi-Sector permit registration, Rockwool’s site will generate a discharge of 86,330 gallons per day (GPD) from Outlet 1 and 10,207 GPD from Outlet 2. Thus the stormwater runoff from the Rockwool facility will contain a significant amount of pollution.

In addition, many of the processes described in the air permit generate fugitive (uncontrolled) emissions. For example, the air permit allows for an outdoor process called the melting furnace portable crusher. The crushing activity will occur outside in a dedicated area that is uncovered, B170. Material that is crushed will drop into a waste pit. Notably, the portable crusher operation is entirely uncontained and uncontrolled by any pollution control devices. This

¹Table 4.1 Summary of Facility Impacts and SIL/SIA Analyses, pp. 35-36, ROXUL Air Quality Modeling Report 12-18-2017.pdf

² Attachment 4, AERMOD Concentration Plots, Appendix C, ROXUL Air Quality Modeling Report, Dec. 18, 2017

³ "Mineral fiber emissions were conservatively assumed to be equal to Filterable Particulate Matter emissions...The listed Hazardous Pollutant (HAP), fine mineral fibers, includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral-derived fibers) of average diameter one micrometer or less." from the Roxul Application for Permit to Construct, Nov. 20, 2017

crusher is a significant source of dust and fugitive particulate matter, the third highest source after the two cooling towers. Fugitive dust and particulates generated via Rockwool's many processes may contain formaldehyde, menthol, phenol, silane coupling agents and other hazardous substances. Best Available Controlled Technology (BACT) limits imposed on the crusher are limited to operational time limits (540 hours/year). The EPA noted in its comments on the air permit "It is the EPA's understanding that limiting hours or operation, or limiting throughput is generally not considered BACT."⁴ Rockwool plans to bring the crusher on-site at least quarterly in order to crush waste for re-melting in the furnace. The material that is crushed is of unknown composition, but will likely include: slag waste from aluminum manufacturing, fine coal dust, coal ash, carbon anode waste (possibly including heavy metals such as molybdenum). This material both before crushing and after crushing will be stored in an open top location, subject to rain. It is difficult to determine if this area is gravel or concrete as it appears to be labeled gravel in several site maps (Exhibit B). The leachate from this storage pile may contaminate groundwater.

In addition, the apparently planned mixture of process water with stormwater water, to be held in on-site ponds, threatens local waters. Pollutants produced by the manufacturing process at the Rockwool Ranson facility are captured in process water, which currently available information indicates can then mix with stormwater, with the resulting mix retained in open ponds. These pollutants are not permitted to be removed via the sewer system to Charles Town Utility Board (CTUB) wastewater treatment plant. The WV/NPDES permit No. WV002349 Modification No. 8, which is the modification of the CTUB NPDES permit that allows CTUB to accept Rockwool's effluent, specifically states the following:

"The permittee may accept non-domestic wastewater from Rockwool (IU02) for treatment and disposal at the Charles Town's main wastewater treatment plant (design flow of 1.75 MGD). The non-domestic wastewater approved for acceptance consists of RO reject wastewater and water softener wastewater from the treatment of finished drinking water from Jefferson Utilities, Inc. The maximum daily volume accepted shall not exceed 17,000 gallons per day. The actual volume of the non-domestic wastewater accepted shall be measured and recorded daily. The acceptance of any other non-domestic wastewater is prohibited."⁵

Therefore, only domestic sewage, reverse osmosis (RO) reject wastewater, and water softener wastewater from the treatment of finished drinking water is permitted by WVDEP to be discharged to the CTUB sewer system. The CTUB sewer system is the only sewer system that is currently permitted to take effluent, domestic or industrial, from the Rockwool Ranson plant. In addition, the discharge of any amount of stormwater to the CTUB sewer system is specifically prohibited in the permit.

In a letter dated November 26, 2019 from the plumbing engineer retained by the Charles Town City Council, Mr. Christopher M. Echenrode, P.E. Senior Project Engineer of Gwin, Dobson, and Foreman Engineers, to Mr. Hennessy, the city manager of Charles Town, Mr. Echenrode

⁴ EPA Comments on Draft Permit Number R14-0037-00108 ROXUL USA, Inc., April 25, 2019.

⁵ WV/NPDES Permit No. WV0022349 Modification No. 8, Modification 1.

posed 18 questions and comments about the internal plumbing plans of the Rockwool facility that he had been asked to evaluate. The eleventh question was as follows.

“Where are the proposed ‘process water’ lines being returned? Why are floor drains and trench drains connected to the ‘process water’ lines and not the sanitary sewer? It was noted that the ‘process water’ lines are accepting the downspout flow. Does the system have sufficient storage capacity to handle heavy rain events? Please confirm if any ‘process water’ enters the sanitary sewer system.”

These questions were answered in a letter to Mr. Hennessy dated December 13, 2019 by Daniel Ferrell, P.E. Principal in Charge of the Thrasher Group, Inc. the engineering firm hired by Rockwool. The answer to the above question was as follows:

“RESPONSE: All ‘process water’ is collected, treated and used within the production building via the closed loop system within the manufacturing process. All floor drains and trench drains are connected to the process water system to maximize water usage efficiency and eliminate any potential discharge of unwanted flows outside of production areas... It can be confirmed that the process water system is closed loop with no effluents and/or interconnections to the sewer system.”

In fact, however, this system is only closed loop in that no effluent from the process water enters the sewer system. In contrast to what is stated in the above excerpted quote, as shown on the plumbing plans, the process water enters the storm drain system, and drains into a settling pond (exhibit C). From the settling pond, it flows over a weir into an open retention pond where it is held until drawn back into the process area via a pipe and pump station. While in residence in the retention pond, volatile organic compounds (VOCs) such as formaldehyde, phenol, and methanol carried within the process water steam are emitting into the air and potentially leaking into the groundwater. The solid particulate pollutants carried into the basin are expected to settle from the water in the settling basin and get scooped out of the settling basin with heavy equipment to be reincorporated back into the process.

An example of this loop can be followed starting on plan page PA0201.1 and PA0201.2 (Exhibit C). One can see that the process water from multiple floor drains and a trench drain enters a filter then enters a pipe labeled storm drain. On plan page PA0201.2, it is seen that process water exits the manufacturing process and the process area via the pipe labeled storm drain and presumably mixes with stormwater as the label for the pipe implies. Plan page P0206 shows these storm drains exiting the building. Plan pages 000-024 and 000-015 show these storm drains (red dotted line) entering the storm drain system and draining into the settling pond.

This demonstrates that process water and stormwater are combined and retained in open ponds. As no process water is permitted to leave the site via the sewer system, this loop system is the reservoir for all pollutants not exiting the system via pond evaporation or through the smoke stacks.

This is a novel system not used previously by Rockwool. Rockwool in Mississippi has a pretreatment facility and its process water is treated at that facility and disposed of via sanitary

sewer. It is not a system which is used by any other mineral wool manufacturer in the state of West Virginia, or in the United States for that matter. This system poses several severe risks of marked pollution of the groundwater aquifer (considered water of the state in West Virginia) in Jefferson County, risks made much worse by the unique hydrogeological features of Jefferson County. This is of substantial and valid concern as a majority of the residents of Jefferson County depend on groundwater as their only source of water.

2. Rockwool should also be required to obtain an individual permit due to the unique hydrogeologic setting and associated vulnerability of groundwater resources in the area in which Rockwool Ranson plans to operate.

Rockwool and its the rainwater for reuse pond, are in extreme proximity to the ground water aquifer and, therefore, to the waters of the state. There are several other relevant factors including the unique hydrogeologic setting, and high aquifer vulnerability in this location. Further, if the ground water is contaminated in this location, tens of thousands of people stand to be affected in Jefferson County, Northern Virginia, and Maryland, as well as the water quality of the Chesapeake Bay. Therefore, Rockwool should be required to obtain an individual permit. (47CSR10 Section 13.4.c.2.A. and 13.4.c.2.D)

It is easily ascertainable that the Rockwool Ranson facility is sited on karst geology.⁶ Despite this information being readily available, when originally permitting the Rockwool facility the Site Selection Criteria (West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.10) were not followed. “Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s), subsidence, or delineated wellhead protection areas, as determined by the Bureau of Public Health. If areas of karst, wetlands, fault(s), subsidence, delineated wellhead protection areas or other areas determined by the director to be vulnerable based on geologic or hydrogeologic information, are determined to exist, then the facility or activity design must adequately address the issues arising from locating in the area(s) of a potentially more vulnerable groundwater resource.” (See Exhibit D.) This facility should never have been permitted to be located on karst. And Rockwool clearly failed to describe the karst underlying its facility and its understanding of the risks associated with the presence of karst in its original 2017 stormwater construction permit application.

A karst landscape is characterized by the presence of sinkholes, springs, caves, ridges and sharp projections in the underlying bedrock, and highly irregular soil-rock interface. The karst landscape is a consequence of the presence of soluble bedrock, which consists of limestone in the case of Jefferson County. In such landscapes water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways. Karst aquifers are known to be “extremely vulnerable to pollution,” due to direct connection between the surface

⁶ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. Carbonates and evaporites. 2012 Jun 1;27(2):143-52.

Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. Field Guides. 2015 Sep 1;40:425-84.

Doctor DII, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In Sinkholes and the engineering and environmental impacts of karst 2008 (pp. 12-22).

and underlying high permeability aquifers.⁷ The groundwater at the Rockwool site is only 60 feet below the ground.⁸ However, at the locations of the water reuse pond and the stormwater pond, large amounts of earth have been removed, meaning the groundwater is even closer to the contents of the pond than 60 feet.⁹

The Rockwool site is on a karst feature known as an “Arabian plain.” This is an upland area with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. This water is easily contaminated and the springs at the margins of the Arabian plain are directly affected by the water quality throughout the aquifer (Exhibit E). It is known from several dye studies that this water flows and diffuses relatively quickly. This is significant as the majority of Jefferson County residents depend on wells for water. The exact number and location of wells in Jefferson County is unknown, because Jefferson County did not have a consistent record of wells until county ordinances were created in 1980. Many of the wells most vulnerable to contamination of any type are those wells built before 1980, which are shallower and have inconsistent construction that makes them prone to inflow. The water in the epikarst at the Rockwool site will affect the drinking water of a majority of Jefferson County residents.

In a dye test performed by the USGS in 1988 and 1989 it was found that the water from just adjacent to the Rockwool site emerged in the headwaters of both the Elk’s Run and Rattlesnake Run¹⁰ (Exhibit F). The Elk’s Run headwaters is a spring about three miles south east of the Rockwool site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Exhibit F). The headwaters of Rattlesnake Run is a spring about 3.5 miles from the Rockwool site and is also a tributary of the Potomac River. These are just two examples of the examples the dye test demonstrated, of how the groundwater at the site communicates with and affects the surface waters in the county.

The Rockwool facility is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. In fact, Jefferson County has 25 watersheds that empty either directly into the Potomac or into the Shenandoah before it joins the Potomac River. **In this way, the surface waterways of Jefferson County have a direct effect on the Chesapeake Bay and as such are required to adhere to Chesapeake Bay watershed-wide federal requirements.**

Through both the groundwater aquifer and Rocky Marsh Run, the activities at the Rockwool facility have the potential to affect the drinking water of the great majority of Jefferson County

⁷ Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. *Earth-Science Reviews*. 2014 Nov 1;138:61-88.

Ford D, Williams PD. *Karst hydrogeology and geomorphology*. John Wiley & Sons; 2013 May 3.

Zhou W, Beck BF. Engineering issues on karst. In *Karst management 2011* (pp. 9-45). Springer, Dordrecht.

⁸ Carpenter DL, Connelly DT, M Innis. Project Shuttle, Site Characterization Report VRP (Volunteer Remediation Plan) Parcel Jefferson Orchards Site. Environmental Resources Management. 2017 Sept.

⁹ *Id.*

¹⁰ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area*, US GEOLOGICAL SURVEY, 1991

residents, but also through its effects on the tributaries of the Potomac River, the drinking water of Northern Virginia and Maryland, and the Chesapeake Bay.

For decades now policy makers have been using “Aquifer Vulnerability” measures, of which karst is very high, to set land use and water resource protection policy.¹¹ The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document *Stormwater Management Design in Karst Areas* states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”¹²

Further, Karst is known to have “severe ground instability problems”¹³. This makes the “aquifer vulnerability” in karst areas very high¹⁴. This also makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater.

The Rockwool site is located in the area with the largest sinkhole density in Jefferson County (Exhibit G).¹⁵ Furthermore, a study demonstrated that in this area, several factors increased the rate of sinkhole development and these included presence of surface water and development (see footnote 13). Again, the WVDEP guidance documents agree. The Chesapeake Bay karst stormwater guidance document¹⁶, which WVDEP cites in the *Stormwater Management Design in Karst Areas*¹², clearly states that detention and retention ponds are not recommended on karst. Quoting WVDEP’s own karst guidance: “attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Therefore, just by virtue of disturbing the ground on the site and creating ponds as Rockwool is doing, Rockwool has a high potential to actually increase the rate of sinkhole development. In Rockwool’s own geotechnical investigation report prepared for Thrasher Engineering by Specialized Engineering, it states the following:

¹¹ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

¹² Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4

¹³ Doerfliger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). *Environmental Geology*. 1999 Dec 1;39(2):165-76.

¹⁴ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

¹⁵ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.

Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. *Field Guides*. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).

¹⁶ CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009

“Some sinkholes failures can be induced by construction activities and are of significance because the sinkholes can directly affect the site being developed, either immediately or some years later. Construction activities that can trigger sinkholes include 1) diversion or impoundment of drainage or dewatering activities, 2) removal of overburden cover, 3) shock vibrations, such as blasting, and 4) increased loading.

Prediction of sinkhole location or occurrence is difficult, if not impossible, and there is always a significant degree of uncertainty associated with the occurrence of future sinkholes. Structures built within the area of influence of a sinkhole can also be affected by sinkhole collapse or subsidence.

By virtue of the underlying geologic formation, the Owner must acknowledge there is an inherent risk of potential ground subsidence or collapse associated with construction of structures in karst terrain. All sites in karst terrain have the potential for sinkhole formation. **Specialized Engineering can provide no warranties or guarantees regarding future sinkhole or subsidence conditions.**¹⁷

In direct contradiction of all of this guidance, Rockwool built several retention ponds, and multiple concentrating swales and ditches. Furthermore, according to site map 16B (exhibit H) Rockwool chose to build two retention ponds far larger than is recommended on karst and several swales in the most sinkhole-vulnerable location on their property.

As of September 2019, there were at least 17 sinkholes on Rockwool’s site as can be seen on the site map (Exhibit I). Sinkholes anywhere on Rockwool’s property pose a risk of groundwater contamination. As noted previously, a majority of the particulate matter from the steam stack is expected to fall within the bounds of the Rockwool property and be entrained in rainwater that may enter such sinkholes along with any other ground level contaminant that may be present.

Unfortunately however, most of the sinkholes have been inside of stormwater ponds, with seven sinkholes appearing in Rockwool’s rainwater reuse pond during construction (Exhibit I). This poses an alarming possibility. The rainwater reuse pond is the reservoir for all of the pollutants produced at Rockwool and this structure developed at least 7 sinkholes during construction alone. In light of this, one can easily see a scenario where a sinkhole develops in the rainwater reuse pond and leads to catastrophic contamination of the groundwater aquifer in Jefferson County. This would affect the drinking water of tens of thousands of people in Jefferson County, and through its direct effects on the surface waterways and the Potomac River the drinking water of Northern Virginia and Maryland and the Chesapeake Bay.

Rockwool’s proposed stormwater pond design is inadequate and inappropriate for karst terrain, especially at this critically sensitive location. Rockwool’s sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes

¹⁷ Project Shuttle -New Industrial Site at the former Jefferson Orchard Kearneysville, Jefferson County, West Virginia Specialized Engineering Project No. 177164, Specialized Engineering 4845 International Blvd, Suite 104 Frederick, MD 21703, July 11, 2017

open under them. In fact, there is a whole field of study into detecting sinkhole development, void development, and earth movement under such liners.

The pond liners Rockwool is using pose several issues. First, they have one layer of 60 mil HDPE liner. It is recommended to have two layers. Sixty mil is also the minimum thickness recommended in the Stormwater Pond Design Guidelines. Because the pond is so large (estimated 72,000 square feet) there will be 3,600 linear feet of on-site welded joints. These joints are the weakest part of the liner and the most likely to fail. Rockwool's HDPE membrane was field fabricated with thousands of feet of welds required to join the rolls of material together. The welds were made in the dirty unconditioned field and are sure to fail due to poor workmanship, cracks, and the unstable soil below. If a large sinkhole opens below the pond, there will likely be catastrophic failure at joints of this liner.

Under this liner, there is a quarter of an inch thick geosynthetic clay layer, and again, there are joints in this layer as well. This is the weakest part of this layer and most likely to fail. This layer is over a geogrid liner, which allows liquids to pass freely through it. Under this are four inches of compacted barrow clay, however the Chesapeake Stormwater Network Technical Bulletin recommends 24 inches of soil or clay. There is no leak detection system shown in the IEP, nor is there a detection system for sinkhole formation. Therefore, although the ponds have three layers of material, only one, the HDPE membrane is designed to prevent liquids to pass through.

The Fabricated Geomembrane Institute recommends a *Double Composite Liner System* where there is potential for groundwater contamination. That system consists of a Primary Geomembrane layer; Geosynthetic Clay Liner/Compacted Soil; Drainage/Witness Layer and a Secondary Geomembrane over Compacted Soil. The Double Composite Liner System provides the best approach to prevent leakage of contaminants from the ponds into the groundwater. No liner system can prevent the catastrophic failure of the system caused by sinkholes opening under the ponds.

A simple search of peer reviewed literature reveals a plethora of information highlighting the risks associated with development in karst geology and many techniques for studying the impact of development on such land. It does not appear as though the municipality of Ranson employed any of these methods when it incorporated or rezoned this area. However, this oversight or lack of due diligence by Ranson does not absolve the WVDEP of its responsibility and liability to protect the water resources. Such a search will also reveal many techniques and methods for designing best strategies for limiting risk in a karst area. It does not appear as though Rockwool employed any of these techniques or guidelines. It seem catastrophic failure of a liner and the contents of the basins escaping into the groundwater resource may be the only way that Rockwool will know a sinkhole has formed under one of its sediment basins.

3. Rockwool's methods are unlike other mineral wool facilities in West Virginia and thus require an individual permit to appropriately protect the waters of the state.

The current Multi-sector Stormwater Permit will not do enough to protect the groundwater and surface water resources of Jefferson County and the region. As you know, a general permit is an NPDES permit that covers multiple facilities that have similar discharges and are located in a

specific geographic area based on the permit writer's professional knowledge of those types of activities and discharges. Whereas, an individual permit is written to reflect site-specific conditions of a single discharger based on information submitted by that discharger in a permit application and is unique to that discharger.

Rockwool's method of manufacturing mineral wool insulation is unique and bears little resemblance to methods used by either Knauf or Armstrong, the other two mineral wool manufacturers in West Virginia. Knauf, located in Inwood, is only 10 km from Rockwool, but uses an entirely different technology (electric arc in a closed vessel, with little or no process water). The Armstrong facility in Millwood, on the Ohio River, is not only smaller (30,000-square-foot plant on 18 acres), but itself does not have a Multi-Sector General Permit for stormwater management—it was required by WVDEP to obtain an individual NPDES permit.

There are no other mineral wool facilities that have the same process-based or site location-based stormwater concerns as Rockwool. Rockwool is the only North American mineral wool manufacturer to attempt to build a facility on karst and it is using different processes than other mineral wool manufacturers. Rockwool is using an innovative method of rain harvesting to supplement its domestic water use. An individual NPDES permit is thus appropriate for Rockwool due to its location on karst and high potential for groundwater contamination.

Evaluation of current rain harvesting technologies reveals no other large commercial and industrial facilities that have rain harvesting at the scale that Rockwool proposes. Most significantly, all of the large rainwater harvesting examples have closed vessels and tanks, often in series, to store the captured rainwater/stormwater. There is also no other instance of rain harvesting where process-related wastewater flows into and mixes with the captured rainwater/stormwater. Rockwool's hybrid Water Storage & Reuse Pond is unique and has not been tried before, not even at their facility in Byhalia, Mississippi. Due to the first ever use of a Process Wastewater and Rainwater Harvesting system, Rockwool must not be allowed to proceed under a General Permit.

4. The Rockwool facility poses additional concerns and risk factors that can only be addressed adequately under an individual permit.

There are many concerns at the Rockwool facility that should and could be addressed if Rockwool were required to have an individual permit. These are also relevant factors in determining the risk to the waters of the state from Rockwool and therefore Rockwool should be required to obtain an individual permit. (47CSR10 Section 13.4.c.2.D)

4.1 Inappropriate Pond Design for Karst Geology

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. However, it is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development, and earth movement under such liners. In an effort to prevent disaster, Rockwool should be required to

install the latest technology in and beneath the liners for its stormwater pond.¹⁸ In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner leakage.

In the Chesapeake Stormwater Network Technical Bulletin No. 1, a guiding document cited by the WVDEP, it gives the following general principles that should be considered in site layout and design of stormwater systems in karst.

1. Any existing sinkholes and karst swales should be surveyed and permanently recorded on the property deed or plat. In addition, an easement, buffer or reserve area should be identified on the development plat for the project so that all future landowners are aware of their presence.
2. Minimize site disturbance and changes to soil profile, including cuts, fills, excavation and drainage alteration, near karst features.
3. Sediment traps and basins should only be used as a last resort after all other erosion and sediment control options have been considered and rejected. In the rare instance they are employed they should serve small drainage areas (2 acres or less) and be located away from known karst features.
4. Designers should place a high priority on preserving as much of the length of natural karst swales present on the site to increase infiltration and accommodate flows from extreme storms
5. Treat runoff as sheet flow in a series of small runoff reduction practices before it becomes concentrated. Practices should be designed to disperse flows over the broadest area possible to avoid ponding, concentration or soil saturation.
6. The use of centralized stormwater practices with large drainage areas is strongly discouraged even when liners are used.
7. Centralized treatment practices require more costly geotechnical investigations and design features than smaller, shallower distributed LID practices.
8. Designers must address both the flooding and water quality aspects of post development stormwater runoff. In most localities, the sequence of stormwater practices should have the capacity to safely handle or bypass the 2- and 10- year design storm, following the methods outlined in Section 5.4.
9. Designers should maintain both the quality and quantity of runoff to predevelopment levels and minimize rerouting of stormwater from existing drainage.

None of the above principles were followed in the case of Rockwool. In an individual permit, these and all of the recommendations in the Chesapeake Stormwater Network Technical Bulletin No. 1 need to be followed.

¹⁸ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ.

Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

In the case of principle number 1 above, the Multi-Sector General Permit requires a topographic map be provided that extends at least a mile beyond Rockwool's property that shows the following: all intakes and discharge structures, sinkholes, drinking water wells, springs, and surface water bodies. Rockwool's topographic map and site map are deficient. There are several of these features within one mile that are not shown, including 8 known in-use drinking water wells, 12 total wells, sinkholes, and documented wetlands. Rockwool falsely claims there are no wetlands.⁸ Mountaineer Gas Company did an extensive karst inventory of sinkholes prior to installing the natural gas pipeline and those sinkholes are also not discussed or depicted on any maps in the IEP or the General Permit application. Outlet #1 and #2 discharge to a field in the northern area of Rockwool's property; it is unclear from the topographical map if there are sinkholes in this area. These deficiencies in the topographical and site maps must be corrected and accounted for in the design of the stormwater plan. Another deficiency that will need to be corrected is the inappropriate design and location of outlets. An example of such faulty location of outlets is that there appears to be a sinkhole close to the location of the level spreader for the stormwater outlet #1 and #2. If this is the case, discharge from outlet #1 and #2 may make this sinkhole worse and lead to groundwater contamination with surface water.

In table 3 of the Chesapeake Stormwater Network Technical Bulletin No. 1, it says that wet ponds are discouraged, need liners and may require a UIC. They go on to say, "use of wet ponds in karst terrain is highly restricted, because of **frequent recurring failures** due to sinkhole formation." It says, at a minimum, there must be six feet of unconsolidated soil material between the bottom of the basin and the top of the bedrock layer. The maximum temporary or permanent water elevations with basins do not exceed six feet. There must be inspections for sinkholes and they must be reported and addressed immediately. A liner must be installed that meets requirements they set forth in their Table 6 (Exhibit J).

A pond—even a lined one—is simply not appropriate for the rainwater reuse pond, as this pond holds stormwater admixed with process water and serves as a reservoir for pollution. The recommendations and warnings are clear from the guiding documents of the WVDEP to the warning from Specialized Engineering (the firm engaged by Thrasher Engineering to evaluate Rockwool's Ranson site) -- failure of a wet pond in karst—even an optimally lined one—is eventual. This would leave the groundwater and surface water, including the Potomac and Chesapeake, at great risk. Therefore, the contents of the rainwater reuse ponds should be stored in above ground closed vessels that are appropriate for the contents, and monitored appropriately for deterioration. The design of the stormwater ponds should be modified to be in accordance with the recommendations from the guiding documents of the WVDEP. Any ponds that are used should be lined and have a multimodal detection system for both leaks and sinkhole development. This can be addressed in an individual NPDES permit.

The WVDEP approved Rockwool's sinkhole mitigation procedure in 2018. First, the sinkhole mitigation procedure allows too much time to pass between the identification of a sinkhole and when it needs to be repaired – time that allows for possible drinking water contamination. The WVDEP should require reporting within hours of noting the sinkhole, and emergency intervention to happen within 24 hours. The WVDEP should directly oversee these repairs. Each

sinkhole should be evaluated to ensure the optimal remediation procedure is employed.¹⁹ There is no contingency for addressing any new sinkholes, which might open up, nor any discussion of inspecting swales, ditches, or ponds related to the stormwater management to check for new sinkholes. Rockwool has already been cited on September 9, 2018 with a notice of violation in six areas, including failure to report a sinkhole. There needs to be the guarantee of a significant fine for future non-compliance, especially regarding sinkholes. Again, it seems that the only way Rockwool will know they have a problem is when there is catastrophic failure. As mentioned previously, Rockwool should be required to have a multimodal detection system for sinkhole development.

The WVDEP director can and should require Rockwool to perform routine groundwater monitoring. It is unacceptable that Rockwool has not included this in its plans. With regard specifically to outside material storage and disposal areas, and impoundments, for industrial facilities, West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that “placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring,” and “groundwater monitoring stations may be necessary to assure protection of the groundwater resource.” Given the information cited previously about the sinkholes on site and our sensitive groundwater resources, WVDEP should require regular and frequent monitoring and reporting of groundwater. This can be required in an individual NPDES permit.

4.2 Buried Utilities

Rockwool failed to inventory and discuss its existing underground pipelines in the Multi-Sector General Permit application. Applicants are required to provide an inventory of all “operations, which may reasonably be expected to contaminate groundwater resources.”²⁰ The following potential sources are specifically listed: Outside materials storage areas, Disposal areas, Loading and unloading areas, Bulk storage and distribution areas, Drums, Sumps, Pumps, Tanks, Impoundments, Ditches, and Underground Pipelines. Rockwool specifically and falsely states that it has zero underground pipelines when, in fact, Rockwool has at least two underground pipelines, including a natural gas pipeline and a liquid oxygen pipeline.

Both the natural gas pipeline and the liquid oxygen pipeline run directly through the area for greatest risk of sinkhole development on the property (Exhibit K). The natural gas pipeline runs between the furnace side of the building and both the Sediment Pond and the Water Reuse Pond, within 10 feet of the stormwater discharge outlets. Rockwool’s liquid oxygen runs from the oxygen tanks that sit immediately south of the Stormwater Pond, under the perimeter road and on to the furnace building. This is not an inconsequential fact. As described previously, due to the

¹⁹ Zeng Y, Zhou W. Sinkhole remedial alternative analysis on karst lands. *Carbonates and Evaporites*. 2019 Mar 5;34(1):159-73.

Zhou W, Lei M. Conceptual site models for sinkhole formation and remediation. *Environmental earth sciences*. 2017 Dec 1;76(24):818.

Huckert A, Garcin P, Villard P, Briçon L, Auray G. Experimental and numerical approaches of the design of geotextile-reinforced embankments prone to sinkholes. In *10th International Conference on Geosynthetics 2014 Sep 21 (Vol. 21)*.

²⁰ West Virginia National Pollutant Discharge Elimination System Multi-Sector General Water Pollution Control Permit, Number WV0111457, issue date September 12, 2019, pg. 37

karst geology, these pipelines are at particular risk of damage leading to groundwater contamination or explosion and catastrophic damage. Underground oxygen piping is also particularly vulnerable to damage by lightning, which may ignite the pipe material.

Pipeline ruptures and explosions have occurred all too often as a result of the failure to monitor pipelines for corrosion or cracks. Rockwool has failed to identify any plans for pipeline monitoring. Such plans should be identified and included in any permit, and monitored by the WVDEP to ensure proper oversight and maintenance. The underground pipelines and their proximity to the stormwater ponds and conveyances, as well as monitoring for corrosion and pipeline integrity, should be addressed in an individual permit.

4.3 Other Facility Design, Control, and Operations Stormwater Management Concerns

The section of the IEP Facility Design, Control, and Operations, it states “storage of solid waste or recycled material is constructed with an appropriate concrete surface that is chemically resistant to waste or recycled material. Liquid is not stored in designated solid waste or recycled material areas and containers that are outside have cover lids. The collection system is connected to the process water system and does not discharge to the stormwater outfall.”²¹ The solid waste area needs to be lined, in addition to a ‘concrete surface that is chemically resistant.’ This will come into contact with liquid as it is uncovered and is the destination for dewatered sludge from other ponds. These areas have not been evaluated and must be addressed along with the storage of waste products, by-products, and materials destined to be recycled. It is possible that the Resource Conservation and Recovery Act (RCRA) should apply here. This issue needs to be specifically addressed, including an analysis of whether RCRA applies to these waste storage activities; and, if so, whether proper regulatory action has been taken. In addition, Rockwool states that they will generate a waste sludge consisting of spent sulfur dioxide-removal pollutant control chemicals. They say that this material will be stored in a silo and then shipped offsite. As such material is often caustic and may entrain toxic chemicals, it will need to be evaluated as a potential hazardous waste. At the very minimum, Rockwool must obtain a RCRA generator number and be in the state and federal RCRA tracking system.

WVDEP guidance for stormwater controls says it **requires** “the employment of mitigating practices to eliminate potential contaminants from reaching the stormwater structure.” Admixed process water and stormwater enter the settling pond, which is a concrete lined forebay to the rainwater for reuse pond, via a 48-inch pipe (exhibit C). The water remains in residence there for some period of time before flowing over a weir into the rainwater for reuse pond. During this residence time, some material settles out of the water. Over time, this builds up in this concrete lined pond. This material is periodically removed using heavy equipment. How will it be ensured that this material is not spilled outside of the concrete lined pond? Just to the south of this settling pond, there is a swale that leads to the stormwater outlet #1 (Exhibit L). If material from the pond is spilled here during clean out of the settling pond, then it will contaminate the stormwater outlet with process materials. This is inappropriate. There should be secondary containment to prevent process materials from entering stormwater in this location. Using closed

²¹ Rockwool IEP submitted with the General Multi-sector Application, section 5.2 Facility Design, Control, and Operations. 2019 pg22.

vessels for the admixed rainwater process water storage would also solve this. This could be addressed in an individual NPDES permit.

The water in the rainwater for reuse pond is drawn back into the process via a pump inlet and pump station (Exhibit M). How will leaks at this liner penetration point be prevented? This needs to be addressed.

The IEP describes how the rainwater reuse pond is sized for a 100-year rain event, and in the event that it is approaching capacity due to a large storm event, Rockwool can store and treat the water. "For example, RAN5 could employ water tank trucks to haul off water to be treated at a designated publicly owned treatment works [POTW]." It is unclear which POTW they are referring to. If it is Charles Town, this should have been described in the NPDES modification that was approved on March 1, 2019. Since it was not described, it should not be allowed by the Charles Town Utility Board (CTUB). This is too serious a risk to not be specifically addressed. Rockwool must amend its application to identify what is the trigger for the preparation for a "heavy rain event," where are the water tank trucks going to come from, if the trucks are contracted, how will Rockwool ensure that they are actually available when needed, how will it ensure that the drivers and operators of these water tank trucks are actually properly qualified to be handling contaminated water, and most importantly, where will these trucks dispose of the contaminated water? What location has agreed to take such water? This could be addressed in an individual NPDES permit.

Rockwool should be required to test the contents of each tanker truck before it is hauled away, to ensure no hazardous materials are mixed with rainwater, and that the trucks are not then contaminated for further water hauling. This should be further evaluated and well defined in the Rockwool permit application. This could be addressed in an individual NPDES permit.

In the most recent publicly available version of the internal plumbing plans of Rockwool (12-13-19) on sheet PA0201.2 there is a sump pit in building number 135 (Exhibit C 10). The label states "Pump piping up and out of pit. Flow has 2 options valve with pipe to outside for release outside or valve with hose connection for a local tote." In the letter to Mr. Hennessy dated December 13, 2019 by Daniel Ferrell, P.E. Principal in Charge of the Thrasher Group, Inc. the engineering firm of Rockwool referenced above, he states:

"For ease of construction, water from this sump will be tied into process water system. For clarification, there are no sumps connected into sewer system. Further clarification can be provided that as per the note indicated on PA021.2 that these sumps are monitored and controlled by plant operator. If the plant operator determines there will be no negative impact, the sump discharge will enter the storm system. This will only occur after the plant's operator evaluates the discharge."

Where does this discharge go when it is "released outside"? How does the operator evaluate the discharge? Is this an unpermitted discharge? This needs to be addressed and appropriate protocols developed for evaluating the discharge need to be put in place and an appropriate discharge location be determined and designated. This can be done in an individual permit.

4.4 Groundwater Protection Plan and Monitoring

A great majority of the households and agricultural businesses in the area surrounding the Rockwool Ranson facility depend on groundwater. If the groundwater were to be fouled, it would devastate Jefferson County and surrounding regions' equine and agricultural industry, and therefore, our economy. It would saddle our local government with restoration cost and legal cost as citizens seek restitution. It would be a major burden to households who will be forced to find alternate, undoubtedly more expensive, sources of water. We have repeatedly seen this play out across our state as the consequences of previous industrial and extractive activity manifested. Here, we have the chance to prevent such devastatingly negative consequences. We are counting on the WVDEP to protect the groundwater we depend on in Jefferson County.

The Multi-Sector application, section 19, requires a Groundwater Protection Plan (GPP), either standalone or in combination with a Stormwater Pollution Prevention Plan, and each must be certified. As provided its IEP, Rockwool's description of groundwater data is woefully incomplete and demonstrates a cursory analysis of what is truly a foundational concern. The WVDEP guidelines for successful Groundwater Protection Plan list the groundwater analysis, data, and other related information that should be included. While Rockwool mentions it exists, it barely addresses it. As described in West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.11, "Each industrial establishment shall have a comprehensive groundwater protection plan (GPP). Each GPP shall contain the following:" Among many elements, the following is listed: "A discussion of all available information reasonably available to the facility/activity regarding existing groundwater quality at, or which may be affected by the site." Previous groundwater data and monitoring are easily available from extensive USGS and county research, yet Rockwool doesn't describe them. Rockwool also fails to describe the geophysical testing done in 2017.¹⁷ The narrative references groundwater data that are included in a table in the appendix, but the appendix section is incorrectly titled, the table has no descriptive text, and does not even label the units of measurement, rendering it useless.

As cited in the sinkhole section previously, there are published studies that are applicable to the Rockwool site and sinkholes. A USGS study used dye tracer tests to determine rates and directions of groundwater flow within the karst aquifer. Dye was injected into a sinkhole in Shenandoah Junction, about a mile from Jefferson Orchards. Two weeks later, the same dye was detected at a monitoring point north of Shepherdstown. Within 20 weeks, it was detected at an additional 5 sites between Kearneysville and Shepherdstown. The study reported movement of up to 840 feet per day – which indicates that contamination can happen quickly. This sort of information is in fact "reasonably available to the facility" and should have been included and considered, and would be able to be in the context of an individual permit.

The director of the WVDEP can and should require Rockwool perform routine groundwater monitoring. West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that groundwater monitoring stations may be necessary to determine if contamination is occurring or has occurred, and also to "assure protection of the groundwater resource." In section 4.9.c. it goes on to say, "new facilities shall monitor groundwater upon order of the director if the director reasonably believes that an industrial establishment or activity has the potential to contaminate groundwater." Page 69 of the WVDEP stormwater management guidance document states, "monitoring wells and groundwater sampling may be required by the

director for the assessment of the potential for or existence of groundwater contamination.” It is reasonable to believe Rockwool has the potential to contaminate groundwater, and monitoring for groundwater contamination should absolutely be required in Jefferson County. Given what we know about the sinkholes on site and our sensitive groundwater resources, and knowing that at least 70% of the people in this county drink well water, the WVDEP should require frequent monitoring and reporting of groundwater. This should be addressed with an individual NPDES permit.

4.5 Inappropriate Description of Pond and Site Runoff Design

Rockwool states, “the outfall discharges water onto an outlet apron during discharge to maintain non-erosive discharge velocities.” The outfall apron needs to be better described and monitoring parameters with action trigger points need to be defined to prevent erosion and sinkhole formation. This could be addressed in an individual NPDES permit.

4.6 Rockwool’s IEP Fails to Identify All Outdoor Process Activities

Rockwool’s air permit (R14-0037) describes a “melting furnace portable crusher” as an outdoor process. This process is a significant source of dust and fugitive particulate matter, third only to the two steam stacks. This process is planned at least quarterly. BACT limits imposed on the crusher are limited to operational time limits (540 hours/year). The EPA pointed out that this was inadequate for BACT on this process, in its comments on the air permit⁴. The air permit describes this process as occurring in a dedicated area that is uncovered, B170. Therefore, B170 is also a materials processing area in addition to a storage area for process-related industrial pollutants as described in a previous section. Again, this area is uncovered, unlined, and about 20 feet from the Water Reuse Pond and Bioretention Basin #2. This outdoor process should be considered in an individual NPDES permit.

4.7 IEP Fails to Address the Potential for Dust and Particulate Contamination of Stormwater Discharges

Rockwool will produce fugitive dust and particulates that may contain formaldehyde, menthol, phenol, silane coupling agents, and other hazardous substances. Several processes generate fugitive dust, including the portable crusher operation mentioned in the previous section. This process is entirely uncontained and uncontrolled by any pollution control devices. In addition, Rockwool’s controlled processes will produce up to 134 annual tons of PM2.5 and 154 annual tons of PM10. Air modeling suggests that the bulk of the dust and particulates will fall out within Rockwool’s drainage and be deposited on building roofs, asphalt surfaces, parking lots, roads, and vegetation. The stormwater, which falls on these surfaces, will capture the dust and hazardous particulates contained within and convey them to the stormwater and bioretention ponds and outlets. As a consequence of the toxic nature of the underlying contaminants, these captured contaminants have the potential to negatively impact groundwater and surface water. The effect on water resources has not been evaluated and needs to be addressed. This could be addressed in an individual NPDES permit

4.8 Internal Plumbing Plans Should Be Included in the Application

The IEP shows that the Stormwater Management Pond that drains areas HrC and HeB, which covers parts of the manufacturing facility, discharges to a field north of Rockwool through Outlet #1. This Outlet #1 is expected to have discharge of 86,330 gallons per day. Is all this water in

fact stormwater? Further, in section 4.4.7 of the IEP, it states, “no interior building floor drain is designed for connection to the storm drain system.” However, we know from evaluating the plumbing plans that the process water admixes with stormwater and enter the rainwater for reuse pond.

It appears from site plan sheet 000-015 that process water from some of the buildings enters the storm drain system that enters the stormwater pond that discharges to outlet #1 and the natural environment. The WVDEP must require that the application contain the internal plumbing plans, to determine that no process water from the facility is expected to be discharged into ponds with a discharge to the natural environment. These issues could be addressed with an individual NPDES permit.

4.9 Storage of Unknown Chemical in Close Proximity to Water Resources

Seven of the 13 Aboveground Storage Tanks (AST) on site have undisclosed contents and hold 88,500 gallons of unknown chemicals. If the contents of the ASTs are unknown, there is no way to determine if the ASTs are in compliance with 47 CSR 63 (AST Design Construction and Installation), or if proper and adequate containment is provided. It is impossible to evaluate the application for adequate groundwater protection water resources absent this information. Further, it is reckless to allow unknown industrial chemicals this near stormwater ponds, sinkholes, and water supply protection zones on karst geology.

Additionally, there is no information provided about Rockwool’s plans to monitor and ensure tank integrity. The risk of corrosion, leaks, and vapor releases from storage tanks has resulted in multiple disasters in this country. Rockwool’s permit application must include its plans for tank integrity inspection.

If there were a spill, the public utility leaders would need to know the contents immediately. This information needs to be on file so an appropriate plan can be made before it is an emergency situation. Disclosure of the contents of these ASTs is imperative, required by statute, and should be part of the permit. This could be addressed in an individual NPDES permit.

4.10 Substantial Harm Determination

The Rockwool facility is located such that any toxic release to groundwater or surface water from the facility would shut down at least one public water supply and should therefore be classified with a Substantial Harm Determination. Harpers Ferry sources their drinking water from Elk Run, Jefferson Utilities Inc. from the aquifer, and Shepherdstown from Rocky Marsh Run. Additionally, there are thousands of households, businesses, and farms that source their drinking water for humans and animals from private wells in the aquifer. As discussed in the karst section of this document, the aquifer is contiguous over a long area of the county and the flow rate of the aquifer is rapid. A Substantial Harm Determination would require some relevant safeguards be in place. This could be addressed in an individual NPDES permit.

4.11 Waste Material Usage

Rockwool states, “no wastes or waste materials are used for deicing, fills, or any other uses on site unless provided for in an existing rule.” The “existing rule” needs to be further defined so that it can be determined what material is being used for what. Rockwool plans to use waste

material back into the furnace. As described in “Section G. Waste Material” of the ground water protection plan this use needs to be allowed either by regulation or permit. What regulation or permit covers this activity? Similar to as stated previously, this issue needs to be specifically addressed, including an analysis of whether RCRA applies to these waste usage activities; and, if so, whether proper regulatory action has been taken. The effect of this waste treatment, storage, and use on the water resources needs to be addressed.

Conclusion

This Petition is not an exhaustive list of the issues that need to be addressed in an individual NPDES permit for the Rockwool Ranson facility. The public simply does not have all of the information, such as the complete up-to-date plumbing plans, to present an exhaustive list of the basis for an individual permit. However, what is obvious is that due to the inappropriate siting and unique process of rainwater harvesting and process water recycling, that the processes at the Rockwool Ranson facility will not be adequately addressed under the General Multi-sector Stormwater Permit. Further, it is clear that Rockwool produces significant amounts of pollution and poses a risk to waters of the state. Therefore, Rockwool should be required to apply for and obtain an individual NPDES permit.

The Jefferson County Foundation respectfully requests that the Department consider the information provided within this submission on Rockwool’s Multi-Sector Industrial Stormwater Permit Application No. WVG611896, and formally respond to this Petition filed pursuant to 47 CSR 10 Section 13.6.b.2.A and require Rockwool to obtain a valid individual permit. Granting this petition will ensure that appropriate protections and oversight can be applied by the WVDEP to address all of the unique concerns the Rockwool facility poses to Jefferson County.

We believe that the information here and available to the DEP in its assessment of the petition, will prove that this is exactly the type of situation contemplated by the rule, to ensure that – whereas here – that a facility poses unique challenges, it deserves unique consideration. As we explained above:

- Rockwool is a significant contributor of pollution and as such should be required to obtain an individual permit.
- Rockwool’s facility is being located in a hydrogeologic setting with vulnerable groundwater resources, which can only be protected via the careful and tailored use of protective measures able to be imposed via an individual permit.
- Rockwool plans novel methods that are unlike those used in other mineral wool facilities in West Virginia and thus an individual permit is needed to appropriately protect the waters of the state.
- We presented 11 other specific concerns, which have been identified that require an individual permit to be adequately addressed.

Based on all the above information, Jefferson County Foundation petitions you, Mr. Caperton, to require that Rockwool apply for and obtain an individual NPDES permit for its Ranson facility. Please contact me for any further information that you believe would be helpful in evaluating the petition.

Regards,



Dr. Christine L. Wimer
President, Jefferson County Foundation, Inc.



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Pollution and children's health

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HIGHLIGHTS

- Pollution was responsible in 2016 for 940,000 deaths in children, two-thirds under age 5.
- 92% of pollution-related deaths in children occur in low- and middle-income countries.
- Most are due to respiratory and gastrointestinal diseases caused by polluted air and water.
- Pollution is linked also to multiple NCDs in children. These diseases are on the rise.
- Pollution prevention is a major opportunity to prevent disease and improve children's health.

GRAPHICAL ABSTRACT



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ABSTRACT

Findings: The Lancet Commission on Pollution and Health found that pollution – air, water, soil, and chemical pollution – was responsible in 2016 for 940,000 deaths in children worldwide, two-thirds of them in children under the age of 5. Pollution is inequitably distributed, and the overwhelming majority of pollution-related deaths in children occurred in low- and middle-income countries (LMICs). Most were due to respiratory and gastrointestinal diseases caused by polluted air and water.

Pollution is linked also to multiple non-communicable diseases (NCDs) in children including low birth weight, asthma, cancer and neurodevelopmental disorders, and these diseases are on the rise. The full impact of pollution, especially chemical pollution on the global burden of pediatric disease is not yet known, but almost certainly is undercounted because patterns of chemical exposure are not well charted and the potential toxicity of many chemical pollutants has not been characterized. The list of pediatric NCDs attributed to pollution will likely expand as the health effects of newer chemical pollutants are better defined and additional associations between pollution and disease are discovered.

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E-mail address: phil.landrigan@bc.edu (P.J. Landrigan).¹ were co-chairs of the Lancet Commission on Pollution and Health and Drs. Suk, Sly and Chiles were members of the Commission.

Conclusion: Pollution prevention presents a major, largely unexploited opportunity to improve children's health and prevent NCDs, especially in LMICs. Failure to incorporate pollution prevention into NCD control programs is a major missed opportunity for disease prevention.

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1. Introduction

Pollution is the world's largest environmental cause of disease and premature death. It is responsible for an estimated 9 million deaths per year—16% of all deaths worldwide—three times more deaths than AIDS, tuberculosis, and malaria combined (Landrigan et al., 2017). In the most severely affected countries, pollution is responsible for more than one death in four. Children are exquisitely sensitive to pollution (Suk et al., 2016).

Despite the great magnitude of the problem, pollution has been neglected in the international development and global health agendas.

To end this neglect, raise awareness of pollution's impacts, and mobilize the resources, political leadership and civic will needed to control pollution and prevent pollution-related disease, the *Lancet* Commission on Pollution and Health was formed in 2015. This Commission undertook a comprehensive analysis of pollution and its effects on human health and the global economy and disseminated its findings in October 2017 (Landrigan et al., 2017). This review is based on the *Lancet* Commission report and highlights pollution's impacts on the health of children.

2. Findings of the *Lancet* Commission on Pollution and Health

2.1. The global burden of pollution-related disease

Using data from the Global Burden of Disease study (Forouzanfar et al., 2015a and 2015b), the *Lancet* Commission found that air pollution is the largest cause of pollution-related disease. Air pollution is responsible for an estimated 6.4 million deaths per year—4.2 million from ambient air pollution (HEI/IHME, n.d.) and 2.8 million from household air pollution (Smith et al., 2014; Yadama, 2013). Water pollution is responsible for an estimated 1.8 million deaths annually. Occupational pollutants—dusts and carcinogens kill an estimated 800,000 people. Lead is responsible for approximately 500,000 deaths each year and additionally causes widespread, but inadequately quantified impairment of cognitive function and behavior.

The *Lancet* Commission found that in many places and especially in the growing cities of rapidly developing low- and middle-income countries, pollution—especially, ambient air pollution and chemical pollution—is getting worse. The numbers of deaths due to pollution-related disease are projected to rise still further in coming decades unless aggressive interventions are undertaken (Lelieveld et al., 2015). Key drivers of these increases are the uncontrolled growth of cities; rising demands for energy; mining; smelting; deforestation; the global spread of toxic chemicals; increasingly heavy applications of toxic insecticides and herbicides; and the growing global use of petroleum-powered cars, trucks, and buses.

2.2. Pollution and non-communicable disease

The *Lancet* Commission noted that pollution is a major cause of non-communicable diseases (NCDs) in persons of all ages—responsible for 16% of all NCD deaths globally. The impact of pollution on NCD mortality is especially strong in heavily polluted low- and middle-income countries where it exceeds the impacts of tobacco, alcohol and obesity (Landrigan et al., 2017; Fuller et al., 2018). In 2015, all forms of pollution combined were responsible for 21% of all deaths from cardiovascular disease, 26% of deaths due to ischemic heart disease, 23% of deaths

due to stroke, 51% of deaths due to chronic obstructive pulmonary disease, and 43% of deaths due to lung cancer (Landrigan et al., 2017).

2.3. Toxic chemical pollution

The Commission considered chemical pollution to be a great and growing threat to children's health. An estimated 140,000 new chemicals and pesticides have been invented and manufactured since 1950, and many have become widely disseminated in the earth's environment (Landrigan and Goldman, 2011; Prüss-Ustün et al., 2011). Patterns of exposure to manufactured chemicals are poorly mapped in most countries, and the toxicity of the majority of chemicals in commerce has never been evaluated.

2.4. Pollution, poverty and human rights

The *Lancet* Commission found that pollution is deeply intertwined with poverty and injustice and stated that pollution threatens fundamental human rights—the right to life, the right to health, the right to well-being, and the rights of the child (United Nations, 1948). Ninety-two per cent of pollution-related deaths occur in low- and middle-income countries—environmental injustice on a global scale, and in countries at every income level, pollution and pollution-related disease are disproportionately concentrated in poor, minority and marginalized communities (Bullard, 1990).

Pollution is not only a consequence of poverty. It can also cause and deepen poverty by producing disease, dysfunction, premature death that results in diminished economic productivity, lost income and increased health-care costs for already impoverished families (Furie and Balbus, 2012). In children, early-life exposures to neurotoxic pollutants can permanently impair cognitive function thus contributing to school failure and reduced lifetime earnings.

Globalization is a powerful driver of the increasing concentration of polluting industries in low- and middle-income countries. Globalization has resulted in the relocation of industries such as chemical manufacture and steel-making from higher income countries to poorer countries where wages are often low, environmental and occupational regulations non-existent and not enforced, and the public health infrastructure weak. Seventy per cent of heavy chemical manufacture today occurs in low- and middle-income countries.

Globalization results also in the trans-shipment of hazardous materials from high-income countries where they are produced to low- and middle-income countries—another example of global environmental injustice. Such dumping includes the shipment of hazardous pesticides, industrial waste, electronic waste (e-waste), and toxic chemicals. Well publicized examples include the transport in 2006 of 500 tons of toxic chemical wastes from Amsterdam to Abidjan, Cote d'Ivoire aboard the vessel *Probo Koala*; the subsequent release of these chemicals resulted in 17 deaths and in >100,000 cases of illness (Margai and Barry, 2011). Another example is a large e-waste site at Agbogbloshie, Ghana where thousands of discarded computers, cell phones, kitchen appliances and other electronics have been shipped from European ports in containers misleadingly labelled “secondhand goods” (Caravanos et al., 2011).

2.5. Pollution is costly

The *Lancet* Commission undertook economic analyses and found that pollution is very costly. Pollution causes productivity losses by

removing economically active people from the workforce through disease and premature death. Pollution is also responsible for increases in health care spending. In rapidly developing, heavily polluted lower middle-income countries the health and productivity losses caused by pollution can amount to as much as 5% of gross domestic product. These great losses can undercut national trajectories of economic and social development (Landrigan et al., 2017). On the positive side of the equation, pollution control can yield substantial economic gains by reducing health care costs and boosting the economic productivity of healthier populations (Suk et al., 2018).

2.6. Pollution and climate change

Pollution is linked to global climate change (McMichael, 2017; Perera, 2017). Fuel combustion—fossil fuel combustion in high-income and middle-income countries, and biomass burning in low-income countries—accounts for 85% of airborne particulate pollution and for almost all pollution by sulfur and nitrogen oxides (Scovronick et al., 2015). Fuel combustion is also the major source of the greenhouse gases and short-lived climate pollutants that are the main drivers of global climate change.

2.7. The root cause of pollution

The global growth of pollution can be directly attributed to the linear, take-make-use-dispose economic paradigm—termed by Pope Francis “the throwaway culture” (Francis, 2015) — a materialistic way of life in which natural resources and human capital are viewed as abundant and inexhaustible, and the consequences of their reckless exploitation are given little heed. This paradigm focuses single-mindedly on short-term economic gain as measured by growth in Gross Domestic Product (GDP). It is unethical and ultimately unsustainable (Raworth, 2017).

2.8. Children's vulnerability to pollution

Fetuses, infants and young children are exquisitely sensitive to environmental pollution, especially during windows of vulnerability in early development (Suk et al., 2016; Vrijheid et al., 2016). Pollution exposures in infancy and early childhood can result in lasting injury to cells and tissues that increases risk of disease in childhood and can also reverberate across the life span (Barker, 2004). A great danger of pollution exposure in early life can be that it can undermine efforts to enhance children's development through improved nutrition, early learning and better health care.

The diseases caused by traditional forms of environmental pollution (e.g., coliforms in water or air pollution from solid fuels) are predominantly diarrhea, pneumonia and other infectious diseases. Modern environmental threats, by contrast, are linked mainly to non-communicable diseases: asthma, neurodevelopmental disorders, birth defects, obesity, diabetes, cardiovascular disease, mental health problems, and pediatric cancer (WHO, 2018). Children in rapidly industrializing countries are simultaneously confronted by both ancient and modern environmental threats to health (Laborde et al., 2015).

A 1993 report by the US National Academy of Sciences (NAS, 1993) explored the origins of children's sensitivity to environmental pollutants and identified four key differences between children and adults:

1. Children breathe more air, drink more water, and eat more food than adults each day on a per-kilogram body-weight basis and therefore have proportionately greater exposures to environmental pollutants.
2. Children's metabolic pathways are immature and therefore children are unable to rapidly detoxify and excrete many toxic pollutants.
3. Children's exquisitely delicate developmental processes are easily disrupted. There exist windows of vulnerability in early human development that have no counterpart in adult life. Exposure to even very low doses of toxic chemicals or other environmental hazards

during these sensitive periods can increase risk of disease in childhood and across the life span.

4. Children have more future years than adults to develop diseases of long latency that may be triggered by harmful exposures in early life.

2.9. Air pollution and children's health

Exposure to air pollution in early human development, especially exposure to fine particulate pollution can be extremely deleterious to children's health and development. Maternal exposure to particulate pollution during pregnancy can injure the developing fetal brain thus diminish children's intelligence (Perera, 2017). Air pollution exposure in pregnancy also increases risk for prematurity and low birth weight, two further risk factors for developmental disabilities (Woodruff et al., 2007; Jacobs et al., 2017). Exposure to air pollution during infancy and early childhood causes lung damage, impairs lung growth, and can increase subsequent risk for asthma, pneumonia and chronic obstructive pulmonary disease (Gauderman et al., 2015; Korten et al., 2017).

2.10. Chemical pollution and children's health

Young children and pregnant women are exposed daily to manufactured chemicals in air, water, soil, consumer products and food (Landrigan and Goldman, 2011). Routine monitoring surveys detect several hundred chemical pollutants in the bodies of all persons (CDC, n.d.). Some widely used chemicals are known to be toxic to children's development. Hundreds more have never been tested for safety or toxicity and their possible dangers to children's health and development are not known (Landrigan and Goldman, 2011).

Toxic manufactured chemicals have been responsible for multiple episodes of disease and death in both children and adults. Historical examples include asbestos (multiple cancers) (Selikoff et al., 1968); tetraethyl lead (adult and pediatric lead poisoning) (Needleman et al., 1979); benzene (leukemia and lymphoma) (Rinsky et al., 2002); benzidine-based dyes (bladder cancer) (Rehn, 1895); the rubber chemical, 1, 3-butadiene (leukemia and lymphoma) (Landrigan, 1990); and the organophosphate pesticides (developmental neurotoxicity) (Rauh et al., 2011).

Newer synthetic chemicals that have entered markets in the past 2–3 decades threaten to repeat this unfortunate history. They include developmental neurotoxicants such as phthalates and brominated flame retardants (Engel et al., 2010; Herbstman and Mall, 2014; Grandjean and Landrigan, 2014); endocrine disruptors (Gore et al., 2015); the herbicide glyphosate, recently found by the International Agency for Research on Cancer (IARC) to be a probable human carcinogen (Guyton et al., 2015); the neonicotinoid insecticides (Cimino et al., 2016); pharmaceutical wastes (Kümmerer, 2009); and manufactured nanomaterials. Early warnings that new chemicals and other environmental hazards might pose hazards to children's health have frequently been ignored (Jarosinska and Gee, 2007). As a result, efforts to control exposures and to prevent disease have often been delayed, sometimes for decades. (Landrigan and Goldman, 2011).

Two fundamental problems that underlie these recurrent episodes of disease and death caused by manufactured chemicals are failure of the chemical manufacturing industries to take responsibility for the materials they produce coupled with absence in most countries of chemical safety policies requiring that new chemicals be tested for safety or toxicity before they are allowed to enter commercial markets (Landrigan and Goldman, 2011). Fewer than half of the most widely used chemicals have ever been tested for safety or toxicity, and fewer than 20% have been assessed for potential to disrupt early human development. Premarket evaluation of new chemicals has become mandatory in only the past decade and in only a few high-income countries.

In children, multiple non-communicable diseases (NCDs) have been linked to toxic chemical pollutants. Prospective birth cohort epidemiologic studies that measure environmental exposures during pregnancy

and in early postnatal life and then follow children longitudinally have contributed greatly to discovery of these associations. Examples include:

- Asthma is increased in children exposed to particulate air pollution (Friedman et al., 2001; Suh et al., 2000);
- Neurodevelopmental impairment with reduction of IQ, shortening of attention span and disruption of behavior is caused by early-life exposure to lead (Budtz-Jørgensen et al., 2013);
- Neurodevelopmental impairment with reduction of IQ is observed in children exposed to PCBs (Jacobson and Jacobson, 1996);
- Neurodevelopmental impairment with reduction of IQ and shortening of attention span is seen in children exposed to methyl mercury (Grandjean et al., 1997);
- Neurodevelopmental impairment with loss of IQ is seen in infants exposed prenatally to arsenic (Wasserman et al., 2007) and to manganese in chemically contaminated drinking water (Khan et al., 2011);
- Neurodevelopmental impairment with loss of IQ and behavioral disruption is associated with prenatal exposure to organophosphate pesticides (Rauh et al., 2011). Prenatal exposures to organophosphates are also linked to changes in brain structure and function in children (Rauh et al., 2012).
- Neurodevelopmental impairment with loss of IQ, behavioral disruption and increased risk of attention deficit/hyperactivity disorder (ADHD) is associated with prenatal exposures to phthalates (Engel et al., 2010; Engel et al., 2018).
- Neurodevelopmental impairment with persisting loss of IQ and disruption of behavior is associated with prenatal exposure to brominated flame retardants (Herbstman and Mall, 2014).
- Slow brain maturation and delayed cognitive development with exposure of school-aged children to traffic-related air pollution. (Pujol et al., 2016, Sunyer et al., 2015)

A major unanswered question is whether there are additional chemical pollutants in wide use today that have not yet been recognized to endanger the health of children. Fig. 1 illustrates this concept in relation to developmental neurotoxicants. Commenting on the hazards inherent in children's widespread exposure to untested chemicals, the late David

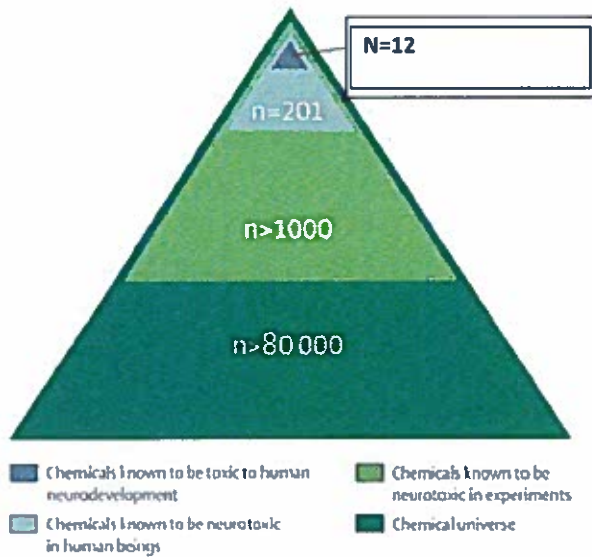


Fig. 1. The extent of knowledge of neurotoxic chemicals. Of the thousands of chemicals in commerce, only a small fraction have been proven to cause developmental neurotoxicity in children, but another 200 can cause neurotoxicity in adult workers and another 1000 are neurotoxic in experimental animals. Most of the chemicals in these two latter groups have never been tested for potential to cause developmental neurotoxicity (From Grandjean and Landrigan, 2006).

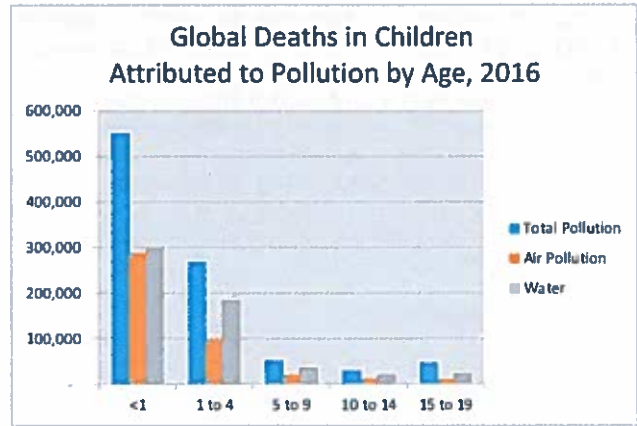


Fig. 2. Global deaths in children attributed to pollution by age, 2016.

Rall, PhD, MD, former director of the US National Institute of Environmental Health Sciences, observed that:

"If thalidomide had caused a ten-point loss of IQ instead of obvious birth defects of the limbs, it would probably still be on the market."
 [(Weiss, 1982)]

2.11. Pollution's contribution to the global burden of disease in children

The World Health Organization estimates that physical, chemical, and biological hazards in the environment are responsible for 26% of all deaths in children under the age of five years – nearly 1.5 million deaths worldwide (WHO, 2018). The WHO definition of environmental risks is broad and includes road accidents, ultraviolet and ionizing radiation, noise, electromagnetic fields, occupational psychosocial risks, built environments, agricultural methods, and man-made climate and ecosystem change as well as pollution.

The Lancet Commission on Pollution and Health found that pollution – defined specifically as air, water, soil, and toxic chemical pollution – was responsible in 2016 for 940,000 deaths in children, two-thirds of them in children under the age of 5 years (Landrigan et al., 2017) (Fig. 2). The overwhelming majority of these pollution-related deaths occurred in low- and middle-income countries. (Fig. 3 and Fig. 4) Most were due to respiratory and gastrointestinal diseases caused by polluted air and water. (Fig. 2 and Table 1).

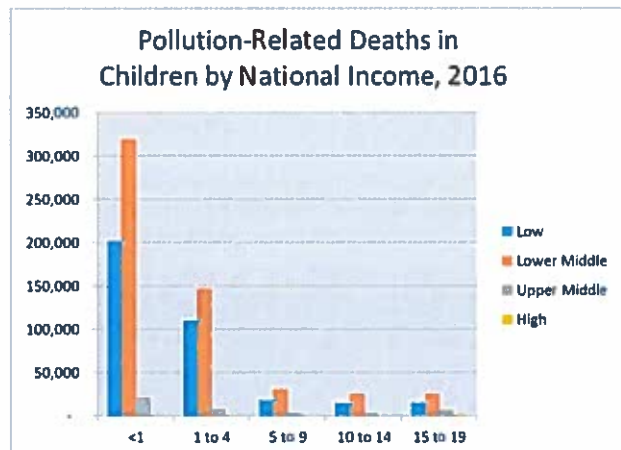


Fig. 3. Pollution-related deaths in children by national income, 2016.

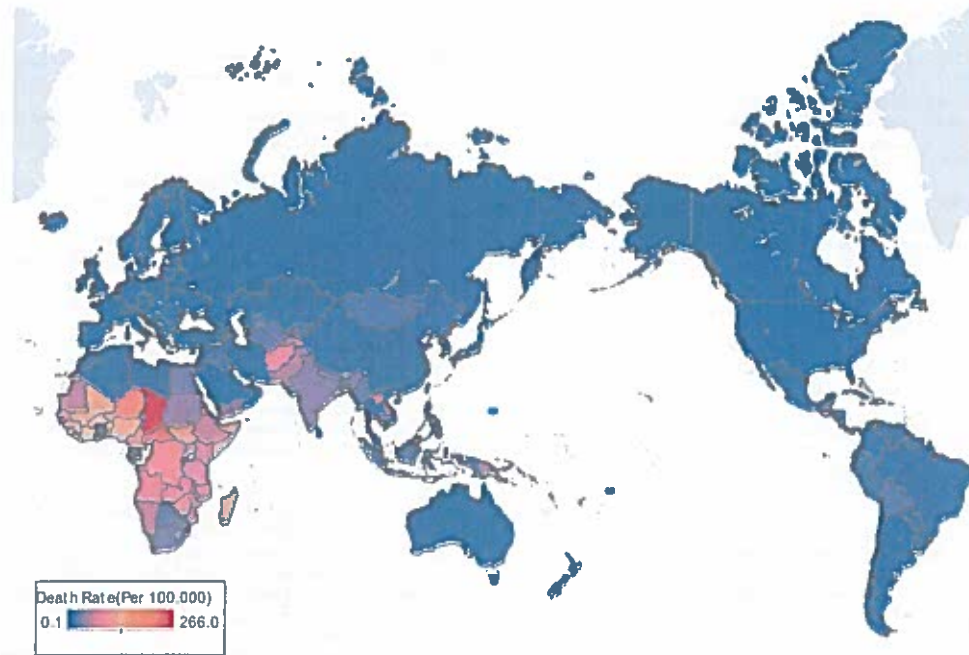


Fig. 4. Number of deaths per 100,000 children, 0–19 years of age, attributable to all forms of pollution, by country, 2016.

Pollution is linked additionally to multiple non-communicable diseases (NCDs) in children including low birth weight, asthma, cancer and neurodevelopmental disorders. Pollution exposures in early life also increase risk across the lifespan for a range of NCDs including chronic obstructive pulmonary disease, cardiovascular disease, stroke and cancer (Barker, 2004). The full impact of pollution and especially of toxic chemical pollution on the global burden of NCDs in children is not yet known and almost certainly is undercounted. A root cause of this lack of information is failure to assess the safety and characterize the potential toxicity of many chemicals to which children are extensively exposed. It is likely that the list of NCDs in children attributed to pollution will expand as the health effects of newer chemical pollutants are better defined and additional associations between pollution and disease are discovered.

3. Conclusion

A key message of the *Lancet* Commission on Pollution and Health is that with leadership, resources and clearly articulated, data-driven strategies, pollution can be controlled and pollution-related disease prevented (Landrigan et al., 2017). The experience of the many cities and countries that have developed, field-tested and successfully implemented pollution control policies provides strong support for this proposition. Implementation of pollution control strategies can provide multiple benefits, both short-term and long-term, for human health, the economy and the environment for societies at every level of income (Grosse et al., 2002; Samet et al., 2017).

Table 1
Global deaths in children attributable to pollution, 2016.

Age range	Total pollution	Air pollution	Water
<1	550,854	286,863	296,655
1 to 4	267,241	95,999	182,924
5 to 9	50,617	18,871	33,882
10 to 14	27,912	10,409	18,660
15 to 19	46,085	8788	21,389

Long-term control of pollution and prevention of pollution-related diseases in children will require that societies at every level of income prevent pollution at source by fundamentally changing societal patterns of production, consumption and transportation (Collins et al., 2013; Collins et al., 2018; Whitmee et al., 2015; McMichael, 2017). This transition will require movement away from the current, fundamentally unsustainable linear economic paradigm towards a new paradigm rooted in the concept of the circular economy and based on recognition of human rights, especially the right of children to health and well-being (Francis, 2015; World Economic Forum, 2014; HEAL, n.d.).

Pollution prevention presents a major, underexploited opportunity to improve child health, prevent NCDs in children, and advance social justice in all countries and especially in low- and middle-income countries. Failure to incorporate pollution prevention into NCD control programs is a major missed opportunity for disease prevention.

References

- Barker, D.J., 2004. The developmental origins of adult disease. *J. Am. Coll. Nutr.* 23 (5885–955).
- Budtz-Jørgensen, E., Bellinger, D., Lanphear, B., Grandjean, P., International Pooled Lead Study Investigators, 2013 Mar. An international pooled analysis for obtaining a benchmark dose for environmental lead exposure in children. *Risk Anal.* 33 (3), 450–461.
- Bullard, R.D., 1990. Boulder CO. Dumping in Dixie: Race, Class, and Environmental Quality. Westview Press, Boulder, CO.
- Caravanos, J., Clark, E., Fuller, R., Lambertson, C., 2011. Assessing worker and environmental chemical exposure risks at an e-waste recycling and disposal site in Accra, Ghana. *J. Health Pollut.* 1, 16–25.
- Centers for Disease Control and Prevention (CDC), d. National biomonitoring program. Available at: <https://www.cdc.gov/biomonitoring/index.html>. Accessed date: 3 July 2018.
- Cimino, A.M., Boyles, A.L., Thayer, K.A., Perry, M.J., 2016. Effects of neonicotinoid pesticide exposure on human health: a systematic review. *Environ. Health Perspect.* 125. <https://doi.org/10.1289/EHP15>.
- Collins, T.J., Crews, D., DeFur, P.L., Dickerson, S.M., Edwards, T.M., Gore, A.C., Guillette, L.J., Hayes, T., Heindel, J.J., Moores, A., Patisaul, H.B., Tal, T.L., Thayer, K.A., Vandenberg, L.N., Warner, J.C., Watson, C.S., vom Saal, F.S., Zoeller, R.T., O'Brien, K.P., Myers, J.P., Schug, T.T., Abagyan, R., Blumberg, B., 2013. Designing endocrine disruption out of the next generation of chemicals. *Green Chem.* 15, 181–198. <https://doi.org/10.1039/c2gc35055f>.
- Engel, S.M., Miodovnik, A., Canfield, R.L., et al., 2010. Prenatal phthalate exposure is associated with childhood behavior and executive functioning. *Environ. Health Perspect.* 118, 565–571.

- Engel, S.M., Villanger, G.D., Nethery, R.C., et al., 2018 May 10. Prenatal phthalates, maternal thyroid function, and risk of attention-deficit hyperactivity disorder in the Norwegian mother and child cohort. *Environ. Health Perspect.* 126 (5), 057004. <https://doi.org/10.1289/EHP2358>.
- Forouzanfar, M., 2015a. Mortality and causes of death collaborators. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 388, 1459–1544. [https://doi.org/10.1016/S0140-6736\(16\)31012-1](https://doi.org/10.1016/S0140-6736(16)31012-1) (GBD).
- Forouzanfar, M., 2015b. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease 2016. *Lancet* 388, 1659–1724. [https://doi.org/10.1016/S0140-6736\(16\)31679-8](https://doi.org/10.1016/S0140-6736(16)31679-8) (GBD, Risk Factors Collaborators).
- Friedman, M.S., Powell, K.E., Hutwagner, L., Graham, L.M., Teague, W.G., 2001. Impact of changes in transportation and commuting behaviors during the 1996 summer Olympic games in Atlanta on air quality and childhood asthma. *JAMA* 285, 897–905.
- Fuller, R., Rahona, E., Fisher, S., Caravanos, J., Webb, D., Kass, D., Matze, T., Landrigan, P.J., 2018. Pollution and non communicable disease – time to end the neglect. *Lancet Planet Health* 2 (3), e96–e98.
- Furie, G.L., Balbus, J., 2012. Global environmental health and sustainable development: the role at Rio+20. *Cien Saude Colet* 17, 1427–1432.
- Gauderman, W.J., Urman, R., Avol, E., et al., 2015. Association of improved air quality with lung development in children. *N. Engl. J. Med.* 372, 905–913.
- Gore, A.C., Chappell, V.A., Fenton, S.E., et al., 2015. EDC-2: the Endocrine Society's second scientific statement on endocrine-disrupting chemicals. *Endocr. Rev.* 36, E1–150.
- Grandjean, P., Landrigan, P.J., 2006. Developmental neurotoxicity of industrial chemicals: a silent pandemic. *Lancet* 368 (9553), 2167–2178.
- Grandjean, P., Landrigan, P.J., 2014. Neurobehavioural effects of developmental toxicity. *Lancet Neurol.* 13, 330–338.
- Grandjean, P., Weihe, P., White, R.F., Debes, F., Arak, S., Yokoyama, K., 1997. Cognitive deficit in 7-year old children with prenatal exposure to methylmercury. *Neurotoxicol. Teratol.* 19 (6), 417–428.
- Grosse, S.D., Matte, T.D., Schwartz, J., Jackson, R.J., 2002. Economic gains resulting from the reduction in children's exposure to lead in the United States. *Environ. Health Perspect.* 110, 563–569.
- Guyton, K.Z., Loomis, D., Grosse, Y., et al., 2015. Carcinogenicity of tetrachlorovinylphos, parathion, malathion, diazinon, and glyphosate. *Lancet Oncol.* 490–491.
- Health and Environment Alliance (HEAL), d. Walking the circle – the 4 guiding pillars for a circular economy. http://env-health.org/IMG/pdf/walking_the_circle.pdf. Accessed date: 30 March 2017.
- Health Effects Institute (HEI) and Institute for Health Metrics and Evaluation (IHME), d. State of global air – 2018. Available at: <https://www.stateofglobalair.org>. Accessed date: 3 July 2018.
- Herbstman, J.B., Mall, J.K., 2014. Developmental exposure to polybrominated diphenyl ethers and neurodevelopment. *Curr. Environ. Health. Rep.* 2 (1), 101–112.
- Jacobs, M., Zhang, G., Chen, S., Mullins, B., Bell, M., Jin, L., Guo, Y., Huxley, R., Pereira, G., 2017 Feb 1. The association between ambient air pollution and selected adverse pregnancy outcomes in China: a systematic review. *Sci. Total Environ.* 579, 1179–1192. <https://doi.org/10.1016/j.scitotenv.2016.11.100> Epub 2016 Nov 29. (PMID: 27913015).
- Jacobson, J.L., Jacobson, S.W., 1996. Intellectual impairment in children exposed to polychlorinated biphenyls in utero. *N. Engl. J. Med.* 335 (11), 783–789.
- Jarosinska, D., Gee, D., 2007 Oct. Children's environmental health and the precautionary principle. *Int. J. Hyg. Environ. Health* 210 (5), 541–546 Epub 2007 Sep 21. (PMID: 17889608).
- Khan, K., Factor-Litvak, P., Wasserman, G.A., Liu, X., Ahmed, E., Parvez, F., et al., 2011. Manganese exposure from drinking water and children's classroom behavior in Bangladesh. *Environ. Health Perspect.* 119, 1501–1506.
- Korten, I., Ramsey, K., Latzin, P., 2017 Jan. Air pollution during pregnancy and lung development in the child. *Paediatr. Respir. Rev.* 21, 38–46. <https://doi.org/10.1016/j.prrv.2016.08.008> Epub 2016 Aug 19. (PMID: 2766551).
- Kümmerer, K., 2009. Antibiotics in the aquatic environment – a review – part II. *Chemosphere* 75, 435–441.
- Laborde, A., Tomasina, F., Bianchi, F., Bruné, M.N., Buka, I., Comba, P., Corra, L., Cori, L., Duffert, C.M., Harari, R., Iavarone, I., McDiarmid, M.A., Gray, K.A., Sly, P.D., Soares, A., Suk, W.A., Landrigan, P.J., 2015 Mar. Children's health in Latin America: the influence of environmental exposures. *Environ. Health Perspect.* 123 (3), 201–209. <https://doi.org/10.1289/ehp.1408292>.
- Landrigan, P.J., 1990. Critical assessment of epidemiologic studies on the human carcinogenicity of 1,3-butadiene. *Environ. Health Perspect.* 86, 143–147.
- Landrigan, P.J., Goldman, L.R., 2011. Children's vulnerability to toxic chemicals: a challenge and opportunity to strengthen health and environmental policy. *Health Aff.* 30, 842–850. <https://doi.org/10.1377/hlthaff.2011.0151>.
- Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., N. Basu, et al., 2017. The Lancet Commission on pollution and health. *Lancet* [https://doi.org/10.1016/S0140-6736\(17\)32345-0](https://doi.org/10.1016/S0140-6736(17)32345-0).
- Lelieveld, J., Evans, J.S., Fnais, M., Giannadaki, D., Pozzer, A., 2015. The contribution of outdoor air pollution sources to premature mortality on a global scale. *Nature* 525, 367–371. <https://doi.org/10.1038/nature15371>.
- Margai, F.M., Barry, F.B., 2011. Global geographies of environmental injustice and health: a case study of illegal hazardous waste dumping in Cote d'Ivoire. *Geospatial Anal. Environ. Health* 4, 257–281.
- McMichael, A.J., 2017. Climate Change and the Health of Nations: Famines, Fevers, and the Fate of Populations. Oxford University Press, London.
- National Academy of Sciences, 1993. Pesticides in the Diets of Infants and Children. National Academies Press, Washington, DC.
- Needleman, H.L., Gunnoe, C., Leviton, A., et al., 1979. Deficits in psychologic and classroom performance of children with elevated dentine lead levels. *N. Engl. J. Med.* 300 (13), 689–695.
- Perera, F.P., 2017. Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change. *Environ. Health Perspect.* 125, 141–148. <https://doi.org/10.1289/EHP299>.
- Prüss-Ustün, A., Vickers, C., Haefliger, P., Bertollini, R., 2011. Knowns and unknowns on burden of disease due to chemicals: a systematic review. *Environ. Health* 10, 9. <https://doi.org/10.1186/1476-069X-10-9>.
- Pujol, J., Martinez-Vilavella, G., Macia, D., et al., 2016. Traffic pollution exposure is associated with altered brain connectivity in school children. *NeuroImage* 129, 175–184.
- Rauh, V., Arunajadai, S., Horton, M., et al., 2011. 7-year neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. *Environ. Health Perspect.* 119, 1196–1201.
- Rauh, V.A., Perera, F.P., Horton, M.K., et al., 2012 May 15. Brain anomalies in children exposed prenatally to a common organophosphate pesticide. *Proc. Natl. Acad. Sci. U. S. A.* 109 (20), 7871–7876.
- Raworth, K., 2017. Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist. Chelsea Green Publishing, White River Junction, Vermont.
- Rehn, L., 1895. Blasengeschwülste bei Fuchsin-Arbeitern. *Verh. Dtsch. Gesellsch. Chir.* 24, 240–252.
- Rinsky, R.A., Hornung, R.W., Silver, S.R., Tseng, C.Y., 2002 Dec. Benzene exposure and hematopoietic mortality: a long-term epidemiologic risk assessment. *Am. J. Ind. Med.* 42 (6), 474–480 (PMID: 12439870).
- Samet, J.M., Burke, T.A., Goldstein, B.D., 2017. The trump administration and the environment – heed the science. *N. Engl. J. Med.* 376, 1182–1188.
- Scovronick, N., Dora, C., Fletcher, E., Haines, A., Shindell, D., 2015. Reduce short-lived climate pollutants for multiple benefits. *Lancet* 386, e28–e31. [https://doi.org/10.1016/S0140-6736\(15\)61043-1](https://doi.org/10.1016/S0140-6736(15)61043-1).
- Selikoff, I.J., Hammond, E.C., Churg, J., 1968. Asbestos exposure, smoking and neoplasia. *JAMA* 204, 106–112.
- Francis, 2015. Laudato Si: Encyclical Letter on Care for our Common Home. Vatican City Holy See.
- Smith, K.R., Bruce, N., Balakrishnan, K., Adair-Rohani, H., Balmes, J., Chafe, Z., Dherani, M., Hosgood, H.D., Mehta, S., Pope, D., Rehfuss, E., HAP CRA Risk Expert Group, 2014. Millions in need: how do we know and what does it mean? Methods used in the comparative risk assessment of household air pollution. *Annu. Rev. Public Health* 35, 185–206. <https://doi.org/10.1146/annurev-publhealth-032013-182356>.
- Suh, H.H., Bahadori, T., Vallarino, J., Spengler, J.D., 2000. Criteria air pollutants and toxic air pollutants. *Environ. Health Perspect.* 108 (Suppl. 4), 625–633.
- Suk, W.A., Ahanchian, H., Asante, K.A., et al., 2016. Environmental pollution: an underrecognized threat to children's health, especially in low- and middle-income countries. *Environ. Health Perspect.* 124 (3), A41–A45. <https://doi.org/10.1289/ehp.1510517>.
- Suk, W.A., Heacock, M.L., Trottier, B.A., Amolegbe, S.M., Avakian, M.D., Henry, H.F., Carlin, D.J., Reed, L.G., 2018. Assessing the economic and societal benefits of SRP-funded research. *Environ. Health Perspect.* <https://doi.org/10.1289/EHP3534> (in press).
- Sunyer, J., Esnaola, M., Alvarez-Pedrerol, M., et al., 2015. Association between traffic-related air pollution in schools and cognitive development in primary school children: a prospective cohort study. *PLoS Med.* 12 (e1001792).
- United Nations, Dec 10, 1948. Universal declaration of human rights. <http://www.un.org/en/universal-declaration-humanrights/>. Accessed date: 18 January 2017.
- Vrijheid, M., Casas, M., Gascon, M., Valvi, D., Nieuwenhuijsen, M., 2016 Jul. Environmental pollutants and child health: a review of recent concerns. *Int. J. Hyg. Environ. Health* 219 (4–5), 331–342. <https://doi.org/10.1016/j.ijheh.2016.05.001> Epub 2016 May 11. (PMID:27216159).
- Wasserman, G.A., Liu, X., Parvez, F., Ahsan, H., Factor-Litvak, P., Kline, J., et al., 2007. Water arsenic exposure and intellectual function in 6-year-old children in Araihazar, Bangladesh. *Environ. Health Perspect.* 115, 285–289.
- Weiss, B., 1982. Food additives and environmental chemicals as sources of childhood behavior disorders. *J. Am. Acad. Child Psychiatry* 21, 144–152.
- Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Souza Dias, B.F., Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G.M., Marten, R., Myers, S.S., Nishtar, S., Oslosky, S.A., Pattanayak, S.K., Pongsiri, M.J., Romanelli, C., Soucat, A., Vega, J., Yach, D., 2015 Nov 14. Safeguarding human health in the Anthropocene epoch: report of the Rockefeller Foundation-Lancet Commission on planetary health. *Lancet* 386 (10007), 1973–2028. [https://doi.org/10.1016/S0140-6736\(15\)60901-1](https://doi.org/10.1016/S0140-6736(15)60901-1) (Epub 2015 Jul 15).
- Woodruff, T.J., Darrow, L.A., Parker, J.D., 2007. Air pollution and postneonatal infant mortality in the United States, 1999–2002. *Environ. Health Perspect.* 116, 110–115.
- World Economic Forum, January, 2014. Towards the Circular Economy: accelerating the scale-up across global supply chains. http://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf accessed March 13, 2017.
- World Health Organization (WHO), 2018. Inheriting a Sustainable World? Atlas on Children's Health and the Environment. WHO, Geneva Available at: <http://www.who.int/ceh/publications/inheriting-a-sustainable-world/en/>, Accessed date: 5 July 2018.
- Yadama, G.N., 2013. Fires, Fuel, and the Fate of 3 Billion: The State of the Energy Impoverished. Oxford University Press.

Stacey Pfaltzgraff

From: Christine Dillon <christine.s.dillon@hotmail.com>
Sent: Thursday, June 18, 2020 3:54 PM
To: Stacey Pfaltzgraff
Subject: Ordinance #2017-302

CAUTION: External Email

Hello, in reference to ordinance #2017-302, I understood the area to be designated "light industry". Can you please clarify if this ordinance would change the current designation to "medium" or "heavy" industry? The site is of course adjacent to residential areas and schools, so I think this clarification is very important to the local citizens.

Thank you for your time,

Christine Dillon
Kearneysville, WV

Sent from [Mail](#) for Windows 10

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Kelly <kellypatton03@hotmail.com>
Sent: Thursday, June 18, 2020 2:03 PM
To: Stacey Pfaltzgraff
Subject: Re: #2017-302 Amending Zoning

CAUTION: External Email

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully ask you to vote NO on Ordinance #2017-302. Vote NO for all the reasons that I will list and so many others. Vote NO for yourselves, your family, for mine, for theirs - your neighbors in this beautiful county and the larger Mid-Atlantic Region. Your decision impacts more than just Ranson, but Jefferson County, the DMV Metro Area, the Chesapeake Bay and all its residents for now and for the future. We teach our kids to do what is right and stand up for what is right. How can we not do the same? This is an opportunity to step up, to Stand Up and say YES to health, to say YES to economic opportunities that not only advance the economy of our area but does it sustainably through agriculture, tourism and small business. Say NO to Corporate Greed and collusion. Say NO to foreign entities that seek to establish heavy industry far away from themselves. Say Yes to my kids, to yours. Research PM 2.5 and NOx exposure and the respiratory impacts of significantly lower lung function in children. In the current pandemic - respiratory compromises are a death sentence for many. The future health climate will present more challenges like this one. Don't we want to give ourselves and our community every chance for health physically and economically? We don't want to open up our beautiful county to more heavy industry - so say NO. Say no for all the reasons.

The industry this zoning change will allow for endangers the health, safety and, welfare of the community, and violates the premise of the smart code zoning that we have spent so much time, effort and federal money employing.

This zoning change will provide for industry that will negatively affect the agriculture industry in Jefferson County and beyond. The combination of the air emissions and threat to the ground water resources could have devastating consequences for the agricultural community of Jefferson County.

The comprehensive plan of Ranson is clear: it states, "the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community." This land is ill-suited for an industrial facility due to its location and hydrogeology. Further, the industry that this zoning change will allow for will adversely affect the health, safety, and welfare of the community through its affect on the agricultural industry.

The agriculture industry in Jefferson County is HUNDREDS of years old and continues to serve our community well today. According to the economic impact study "A Shared Agenda for Growing West Virginia's Agricultural Economy, Prepared by Fourth Economy for West Virginia Department Of Agriculture West Virginia University Extension Service 2012," Jefferson County is the second highest producing county for crops sales, third highest for fruits and vegetables sales, and in the top 9 counties for sales of animals and animal products.

Agriculture, tourism and the equine industries work synergistically to have an outsized positive impact on the economy in Ranson and Jefferson County as a whole. Agriculture drives tourism by creating agro-tourism opportunities, preserving beautiful open spaces that contribute to the bucolic nature of our county, and providing the locally produced agriculture goods many tourists are look for in our markets and restaurants. Agriculture also supports the equine industry by providing local products like hay and straw, helping maintain pasture land, co-supporting local dual-purpose retail stores, and helping recycle by products. Agriculture helps maintain the way of life that many those who choose to live in Jefferson County enjoy. Industrial manufacturing and industry this zoning will provide for could never achieve these things.

Local agriculture also provides a source of locally produced agricultural goods. It has become apparent with the current pandemic and health emergency. This became a supply chain crisis because as our supply chains have moved to be ever more lean and efficient they lack resiliency and agility. By having a local source of agricultural goods and food we add resiliency and agility into our own economy and community. The agricultural industry in Jefferson County provides this.

A plethora of scientific studies have shown that a variety of air pollutants produced by the type of industry this zoning change would provide for causes decreased yields of both quantity and quality for several of the crops important to Jefferson County including winter wheat and soybeans. Soybeans and wheat are two of the crops significantly affected and two of the most prevalent crops in Jefferson County. Lower crop yields harm the farms and all the members of the down stream supply chain as well as the consumer. In this way, this zoning change will adversely affect the welfare of the community.

Recent studies have shown that even small increases in air pollution affect the productivity of agricultural workers. Similar to the reduction in crop yield this will negatively affect the individual workers, businesses, consumers and industry as a whole. In this way, this zoning change will adversely affect the health and welfare of individuals and the community.

Even more devastating is the possibility of groundwater contamination.

The land at the subject location has karst hydrogeology and as such has porous bedrock and severe ground instability problems. The porous bedrock allows rapid diffuse infiltration of surface water into ground water and the severe ground instability problems leads to sinkhole development. Sinkholes provide direct connection of the surface water with the ground water aquifer through point infiltration. In fact, according to a 2012 study by Doctor and Doctor, the subject location and that of Terrapins Neck have the highest sinkhole vulnerability of any sites in Jefferson County. The propensity and easy of diffuse and point infiltration in areas of karst hydrogeology give them very high aquifer vulnerability meaning the aquifer is very vulnerable to contamination. For this reason, this measure has been used for decades by policymakers to set land use regulations. In this way, this zoning change and the industry it will provide for will adversely affect the welfare of the community.

The WVDEP recognizes development in car karst areas puts water resources high-risk for contamination but also recognizes that this is best protected against true local land use and zoning ordinances. WVDEP’s guiding document Stormwater Management Design in Karst Areas states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.” This document also references the Chesapeake Bay Stormwater Network karst stormwater guidance document the CSN Technical Bulletin no. 1,

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Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed. In which it states "...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." Land use policy in Ranson and zoning need to take aquifer vulnerability into consideration as these agencies and documents suggest.

The Jefferson Orchards Voluntary Remediation Plan application reports that the ground water is only 60 feet from the surface at the site. It is described in the scientific literature that this land is an upland plane with large amounts of water in the epikarst, and contamination of this water effects the whole aquifer including the communications with surface water streams. A USGS study demonstrated that the groundwater adjacent to the site communicates readily with several surface water structures and wells miles away from the site. The effects of contamination at this site would go well beyond Ranson fouling large portions of the ground water and surface water in Jefferson County.

Groundwater contamination at the site would have devastating effects on the Agricultural industry in Jefferson county. For geographic and economic reasons it is simply infeasible for the agricultural industry to rely on utility provided water. Based on the scientific literature the site being considered for rezoning is one of the areas of highest aquifer vulnerability in Jefferson County and is inappropriate for the industry that this zoning change will provide for. This land is clearly ill-suited for industrial use and should not be zoned for it.

By threatening the local agricultural industry, the industry that this zoning will provide for will threaten the health, safety, and welfare of the community, and this land is not well-suited for industrial use. The Comprehensive Plan in Ranson is clear the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

As an elected official, the responsibility is to the people. Not to foreign corporations. Not to fear of reprisals and law suits. To the people, for the people. Evaluate the response to this singular issue. How many count YES and how many count NO? Let that dictate the people's voice. Know that the people will stand with the people who represent them well. This is a challenge and a big one. Don't act in fear...again I point to our children - we raise them to not be bullied and to not go with the flow, to stand up for the little guy, for justice. I urge you to vote NO. As Hippocrates once said and the medical profession pledge at the onset of their practice. FIRST, Do No Harm. Please, I urge you to Vote No.

Sincerely,

Kelly Edwards

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June 18, 2020

Via Electronic Mail
Ranson City Council
c/o Stacey Pfaltzgraff
312 S. Mildred Street
Ranson, WV 25438
spfaltzgraff@ransonwv.us

Re: Proposed Ordinance #2017-302: "An Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: 'Jefferson Orchards' Reallocation Transect Districts (District 8, Tax Map 12, Parcel 1)"

Dear Members of the Ranson City Council:

Thank you for the opportunity to submit public comments on the City of Ranson's proposed Industrial District Ordinance. I'm Paul Espinosa, Public Affairs Manager for ROCKWOOL's Ranson facility and I appreciate the opportunity to offer these comments as you consider re-enactment of the above-referenced zoning ordinance to address the administrative issue identified by the Circuit Court.

While I appreciate that the question before the Council is a narrow one – specifically whether the proposed zoning ordinance comports with Ranson's comprehensive plan – it's highly relevant in that context to address the economic impact ROCKWOOL's facility represents.

During the construction phase of our facility, we've been pleased to support the employment of 275 full-time construction workers on an average daily basis. While dedicated to the project, workers are supporting local businesses such as restaurants, hotels, grocery stores, recreation and more during off-hours, providing additional income opportunities and revenue for the City. And that's on top of the \$1.5 million ROCKWOOL has paid in B&O taxes and permitting fees to date.

Over the next 10 years, our new Ranson facility will generate an estimated \$218 million economic impact, including \$64 million in payroll for the 150 new direct manufacturing jobs that will be created across all trades. Over the same period, we anticipate that our facility here in Ranson will generate an estimated \$5 million annually in local economic activity, largely due to an increased demand for local services. During the first 10 years of operations, we expect to pay approximately \$400,000 in property and other taxes per year, increasing to approximately \$1 million per year every year thereafter. By

ROCKWOOL 655 Northport Avenue, Kearneysville, West Virginia 25430
T: 1-800-265-6878 www.rockwool.com

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comparison, prior to ROCKWOOL's purchase of the site, the property was generating approximately \$8,500 in taxes per year.

And of course the construction of the ROCKWOOL facility is driving valuable infrastructure upgrades including new water and sewer lines, a new state road, and the availability of natural gas for both commercial and residential customers along the Rt. 9 corridor.

More specifically to the City of Ranson, the ROCKWOOL facility will generate an estimated half million to three-quarters of a million dollars in annual tax revenue, representing about 10 percent of Ranson's annual budget. In the aftermath of the COVID-19 pandemic and associated economic downturn, it's fair to assume that those additional revenues will prove useful in helping to maintain Ranson's fully-staffed around-the-clock police department and to fund essential public works projects & services, parks & recreation, the Convention & Visitors Bureau, and the City's economic development efforts.

The economic impact I've summarized certainly supports a conclusion that the Industrial Zoning Ordinance is consistent with the City's comprehensive plan.

Thank you again for the opportunity to contribute to your deliberations and for your willingness to address the administrative issue identified by the Circuit Court.

Sincerely,

Paul Espinosa
Public Affairs Manager, ROCKWOOL West Virginia

Stacey Pfaltzgraff

From: Charlotte Fremaux <cmfremaux@gmail.com>
Sent: Thursday, June 18, 2020 2:31 PM
To: Stacey Pfaltzgraff
Subject: RE: Ordinance #2017-302 "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP...

CAUTION: External Email

Good afternoon,

I am writing to you today to request that you please vote no on ordinance #2017-302 and not accept Special District Industrial Zoning.

I have read the Comprehensive Plan of Ranson under General Land Use Objectives for the land formerly known as Jefferson Orchards, and I find that ordinance #2017-302, which seeks to reallocate land use and significantly change the nature of the property, does not align itself with the parameters of ensuring "that industrial facilities do not adversely affect the health, safety, or welfare of the community." The industry that the new ordinance would allow (and which it has effectively already allowed) is not "well-suited" for the land. This zoning change would clearly adversely affect the health, safety, and welfare of the community. The Comprehensive Plan further states, "the City will designate ample land that is well-suited for industrial facilities." This land is clearly ill-suited for industrial use and should not be zoned for it. The location of the land on karst hydrology makes it of prime concern for the occurrence of sinkholes, and the nature of karst (as dye tests have shown) allows for the rapid spread of contaminants, once introduced into the groundwater. The WVDEP recommends strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

Therefore, the council should vote no on the zoning change.

I live in Shannondale on the Blue Ridge Mountain, a few hundred feet down-mountain from the Appalachian Trail. I know the importance of a clean environment for the health of our forest and the beauty of nature that attracts our abundant tourism. I moved here in my retirement purposely to live in this forest, enjoy the beauty of the surrounding nature, participate in the local economy and add to the tax base. I did not move here to be in the direct line of air pollution from 200'+ smokestacks belching out myriad toxic chemicals and VOCs. I didn't count on the sprawling ugliness of the Rockwool plant in my view-shed. I would not have considered the move had I known that polluting industry - that would threaten the health of the forest and the safety and purity of the water - was part of the plan for Jefferson County.

Jefferson County has generated more tourism-derived revenue (an average of \$178 million per year) for state and local governments than any other county in West Virginia in the last 10 years. People come to Jefferson County for the landscape and view-sheds; to paddle our rivers, purchase our agricultural products, visit our historical places, hike our trails, and visit our bird and nature sanctuaries - all of which are threatened by the intrusion of heavy industry. Besides being a community volunteer and supporting many local businesses, I personally participate in a local organic farm's CSA program - this farm sits in the valley on the karst. As everyone is painfully aware, karst is the worst place to place a polluting industry that has no comprehensive or effective plan for its waste and stormwater, which will include coal waste water and potentially, leaks from fracked gas pipelines. The farmers, who put so much labor into their land and into

growing healthy food, are directly threatened by heavy industry. The 7,000 jobs that the tourist industry provides far outweigh the paltry promise of 150 jobs from Rockwool. Indeed, you would need 59 Rockwools to replace the jobs generated by the tourism industry in Jefferson County.

In 2018, tourism generated \$213.7 million in individual earnings and \$842.6 million in direct spending in Jefferson County. And most of the money generated by tourism in Jefferson County comes from neighboring states. The tourism industry is not simply recycling local dollars but actively bringing in money from biotech economy of Maryland, hi-tech economy of northern Virginia, and political economy of DC and using it to power our own and that of our state. The powerful draw of our local tourism industry allows Jefferson County to harness the success of neighboring areas and direct it back into our own local economy.

It is nothing short of cutting off our nose to spite our face to allow the intrusion of inappropriate, ill-suited, and polluting industry that would threaten the many economic benefits currently reaped from what we already have.

I believe that the intent of the original Project Shuttle was to cloak itself in secrecy and misrepresent itself as a benign entity. The wool was pulled over many eyes on many levels, and the City of Ranson failed to adequately publish the original ordinance change so that the public could understand what was at stake. The outcry over this has been abundant and a majority of the county does not support the new land use plan and all the harm it will do to our environment, economy, and public health. Endangering our health and the safety of our air and water are not a responsible way to bring business to Jefferson County.

Again, I request that you vote no on ordinance #2017-302, and allow our county and our area to continue to thrive from the myriad of benefits and economic generators of commerce we share. If you do not, you are going to regret the negative effects of your decision, as businesses close, school children become sick, the equine industry declines, tourism is negatively impacted, and people like me move elsewhere.

Sincerely,

Charlotte M Fremaux
175 Fern Drive
Harpers Ferry, WV 25425
301-404-8639

Stacey Pfaltzgraff

From: Karen Glennon <kkellyglennon@gmail.com>
Sent: Thursday, June 18, 2020 1:40 PM
To: Stacey Pfaltzgraff
Subject: Ranson rezoning

CAUTION: External Email

To the Ranson Mayor and City Council members,

I am deeply opposed to the rezoning of the former Jefferson Orchard site as Special District Industrial. This goes against the comprehensive plan for Ranson. I believe this will negatively impact the health and well being of Jefferson County residents; damage tourism, reduce property values, harm race horses and impact crop yields, among other things. The duty and obligation of local government is to perform the wishes of the citizens, follow land use guidelines and protect the land and its inhabitants. Profits of foreign companies are not in the list of obligations public officials hold to their citizens. I am deeply disappointed in the actions of my local government and I await the day I leave this state. West Virginia has a history of selling out it's land, it's people and it's resources, leaving behind toxic destruction....all for the profits of others elsewhere. I was stupidly naive to think this wouldn't happen here in the Eastern Panhandle - and at the hands of so few, who will be remembered for the harm they are causing and who will be voted out. Unfortunately, the damaging legacy they are wanting to bring will continue for a very long time. I have all intentions of leaving WV. If Rockwool is built, it'll be sooner than I planned. I feel betrayed and angry and I want Ranson to make this right and stop the industrialization of this parcel of land.

Air pollution knows no town boundaries, no city boundaries, no county or state boundaries either. The entire region will be negatively impacted by this. We deserve better.

Karen Glennon
 67 Brierly Court
 Shepherdstown, WV

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Stacey Pfaltzgraff

From: Jan Hafer <janhafer52@gmail.com>
Sent: Thursday, June 18, 2020 4:19 PM
To: Stacey Pfaltzgraff
Cc: Jan Hafer
Subject: Ordinance #2017-302 and tourism

CAUTION: External Email

To the Ranson City Council,

I urge you to vote NO on Ordinance # 2017-302 which, if enacted, would allow industry that will harm our county's traditional, successful economic foundational endeavors such as tourism, agriculture, and small businesses which are of great importance to our community. I am particularly concerned with the adverse effect this type of industry, referenced in this ordinance, would have on our thriving tourism industry which has grown steadily through the years and is a destination for travelers from all over the World. It is a well-known fact that our thriving tourism industry contributed over \$170 million to local and state coffers and provide jobs for over 7,000 individuals. Introducing industry that will bring more air pollution, clogged traffic, potential harm to our waterways, and light and noise pollution due to round the clock operations will negatively affect the tourist experience.

I have been associated with tourism in Jefferson County since 2013 in a variety of roles including President of the Shepherdstown Visitors Center Board of Directors (2018-2020), Director of the Shepherdstown Visitors Center (2013-2016), board member (2016-2018), and volunteer. Direct experience with thousands of visitors through the years has taught me what draws them to Jefferson County and Shepherdstown. I think you know it, too. A rural nature, opportunities for splendid outdoor activities, beautiful vistas, and historic character are just a few of the reasons why we are a destination for millions of visitors through the years, many of whom return year after year.

If you adopt Ordinance #2017-302, you put this all at risk. Please vote NO on Ordinance 2017-302.

Sincerely,

Jan Christian Hafer
 Shepherdstown

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)



Re/Max 1st Realty
 219 West Washington Street
 Charles Town, West Virginia 25414

VIA EMAIL: SPfaltzgraff@ransonwv.us

City Council,
 City of Ranson
 c/o Ms. Stacey Pfaltzgraff
 312 S. Mildred Street
 Ranson, WV 25438

Re: Written Comments in Support of Ordinance # 2017-302 (the “Rezoning Ordinance”)

Dear City Council Members:

As the Broker for Re/Max 1st Realty – Commercial Division and Haymaker & Associates INC, I am submitting this letter in favor of the Rezoning Ordinance for Jefferson Orchards, Inc. I believe the proposed rezoning is not only consistent with the City’s 2012 Comprehensive Plan but will permit the City to better fulfill the goals articulated in that plan. More specifically, the proposed rezoning is beneficial not only to the economic development within the City of Ranson but to the entirety of Jefferson County.

As a real estate agent and Broker, I have had decades of experience in the tri-state area representing sellers and buyers of commercial real estate. I have had extensive experience marketing property and promoting economic development locally. I have represented the Jefferson County Development Authority in its efforts to attract new businesses to the Burr Business Park since 2013. Jefferson Orchards, Inc. has utilized Re/Max 1st Realty – Commercial Division to market its real estate for development over the last several years. I know firsthand the challenges our local development efforts face and approving this Rezoning Ordinance will help alleviate some of those obstacles.

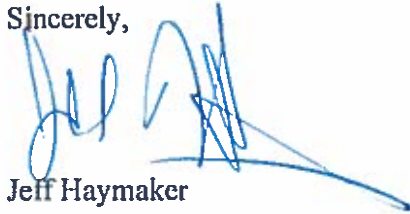
One of the primary concerns that any new developer expresses in assessing property within the City of Ranson and surrounding areas is the lack of utility infrastructure and related services. Only with the recent construction of new manufacturing facilities have we experienced a newfound commitment to extending and enhancing the existing utility infrastructure. State and local

government funding, along with private investment, has led to the extension of natural gas to the area. Further improvements to the community's water, sewer, and electrical service are also in progress. Future economic development in the local area is dependent on continued investment in infrastructure and related services.

Without the appropriate zoning in place, it becomes exceedingly difficult to attract and retain new businesses. The Rezoning Ordinance at hand does not create any "new" SDI zone or any new permitted use of the Jefferson Orchards Property. It maintains the permitted uses previously approved and modifies the existing SDI zone boundaries. With those changes in place, the zoning will be consistent with the City's 2012 Comprehensive Plan.

For the reasons outlined above, I am supporting the Rezoning Ordinance for Jefferson Orchards, Inc.

Sincerely,



Jeff Haymaker

Hazelfield Farm

June 18, 2020

Keith D. Pierson, Mayor
Gene Taylor, At-Large Council
David Cheshire, At-Large Council
Donnie Haines, First Ward Council
Scott Coulter, Second Ward Council
Mike Anderson, Third Ward Council.
Amanda Stroud, At-Large Council.

Dear Mayor Pierson and City Council Members:

We are writing to inform you that the zoning amendment Ordinance #2017-302 - Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: "Jefferson Orchards" Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1) is in violation of both the 2012 Comprehensive Plan and The City of Ranson Zoning Ordinance, specifically, Chapter 19A, as well as prohibitions against spot zoning.

We have consulted with Zoning and Smart Code experts including the firm that wrote the 2012 Smart Code-based City of Ranson Comprehensive Plan (the "Comprehensive Plan" or "Comp Plan"). Below are the assertions made in the Resolution that you are voting on, followed by an enumeration of some of the ways that the proposed action violates the law. Passages taken from the text of the Ordinance are presented in bold type throughout this letter:

1. **"the Ranson Planning Commission finds that the zoning map amendment is consistent with the adopted comprehensive plan as revised and has been properly noticed."**

Our response: The zoning map amendment before you is in violation of the Comprehensive Plan. The creation of an SDI (Special District Industrial) is permitted in the Comp Plan only because it is adjacent to the station site. This would create the possibility of a Transit-Oriented Development (TOD) that is complementary to an adjacent industrial use. Clearly the Zoning and Comp Plan call for residential use adjacent to the SDI.

The Smart Code that generated the Comp Plan is fundamentally about balancing the needs of the community and industry with quality of life. Specific aspects of the Chapter 19A Zoning Code require that "all land within 1/2 mile of the station shall be TOD". Exhibit A (attached) is the 2012 Zoning Map with the required radius added, and it shows the intent

clearly. Exhibit B (attached) is the “boundary adjustment” submitted by Gordon on behalf of Rockwool. Both images have had the 1/2 mile circle required in the hatched circular overlay added so that they can be compared. The 1/2 mile requirement is actually written on the site plan submitted by Gordon on behalf of Rockwool and the outline of the restriction is clearly shown on the site plan submitted and on the zoning map - an acknowledgement that there is a mandatory zoning restriction that the applicant simply disregarded. The SDI as shown is within 600 feet of the station site indicated in the applicant’s site plan. This is more than 2000 feet closer than permitted either in the Comp Plan or Chapter 19A of the zoning code.

The so-called “boundary adjustment” on the maps submitted with the application come within 600 feet of the station. The code says that it is only the existence of a proposed location of a transit station that allowed the SDI to be created at all, and that is how the entire zoning of the Jefferson Orchards came to look as it does on the 2012 Comp Plan-based zoning map: an industrial zone tied closely to a Transit Oriented Development. The proposed ordinance is not a boundary adjustment application; it is a proposed rezoning of the site and the code states it clearly. Changing the approved TOD zoning of a portion of the site so that the SDI comes to within 600 feet of the station site does not meet the criteria for a simple boundary adjustment allowed under the code sections that are cited by the applicant or the Comp Plan..

2. **“Consistent with Chapter 19A, Section 1.3.7, upon approval of the Land Development Plan and Plat by the Planning Commission pursuant to Chapter 19A, 3.1.4, specific transect districts shall replace the SC-NC [Smart Code New Community] designation on the official zoning map as part of the Planning Commission’s approval of the land development plan and plat, so long as the allocation of the zoning districts with the land development plan and plat.”**

“ PC Resolution # 17-10 are consistent with Table 3 of Chapter 19A and the official zoning map shall not be considered a zoning amendment pursuant to W. Va. Coe 8A-7-8; thus, the placement of transect zones will not require further action of the Planning Commission or City Council. Transect zone placement shall be considered a continuation of the original SC-NC rezoning process pursuant to this Ordinance. So, long as the applicant complies with Table 3 of Chapter 19A, the transect districts may be relocated within the parcel(s) administratively and on the official zoning map until final plat approval. Once the final plat is approved pursuant to Chapter 19A, 5.1.8.g, transect districts may not be relocated or rearranged and may only be amended through the City’s rezoning process. “

Our response: The use classification of transect zones and districts is very specific. It seeks to balance uses and off-set the negative impacts of certain uses. This is key because

while the Comprehensive Plan and the Zoning Code permit boundary adjustments as cited in your ordinance, in the case of the Jefferson Orchards the applicant has failed to comply with Table 3 of Chapter 19A which calls for SC-NC development of the site consistent with the Comprehensive Plan.

The illegal rezoning of the site, which is taking place in increments, has prohibited any possibility for the “community” that is fundamental to both the Smart Growth concept and the Comp Plan that underlies and supports the zoning code. The intention is clear - after this action illegally passed the first time, the owners of the TOD site and Rockwool placed a permanent restrictive covenant on the TOD lands indicated in this application, thereby extinguishing all possibility of residential community use. This is a gross violation of the zoning, which would allow a limited industrial area only if it is next to the TOD. The two cannot be separated and the extinguishment of the residential use makes it impossible for the complementary balanced development of industry to occur as per the Comprehensive Plan.

3. “The Ranson Planning Commission hereby finds that the zoning amendment is consistent with the purposes of zoning and consistent with the City of Ranson’s Comprehensive Plan because the G3 Preferred Growth Sector of the application area is a priority expansion area of the 2012 City of Ranson Comprehensive Plan. And encourages the use of Chapter 19A Smartcode.”

Our response: This paragraph from the Ordinance says nothing other than affirming that the proposed action is subject to the code that is being violated. The reference cited is actually reaffirming the requirement that any zoning actions taken are to be guided by and consistent with Chapter 19A. Memoranda between City Officials suggest that an expansion of the industrial area over the entire TOD site is under consideration. The City of Ranson cannot, by law, pass laws, acts or amendments that violate the Comprehensive Plan.

Other illegal actions that have taken place in addition to the attempted passage of this resolution include the arbitrary increase in permitted heights of chimneys and other tall structures. The original restrictions in the Smart Code are part of a balance of uses that underlies Chapter 19A. Arbitrary changes that fundamentally alter the code are violations of the Comp Plan. The intent of the Comp Plan is to allow industry but cap industrial facilities at a certain size, including heights. The code is specific and states explicitly that the industrial use and heights permitted cannot “substantially injure the value of the adjoining property”. The Current owners of the TOD site may welcome the proposed de facto rezoning of the property, the codes explicitly prohibit the devaluation of the TOD portion of the site required by the code as well as devaluation of the adjoining county land, and may not be waived.

This issue alone is enough to invalidate the Ordinance and related illegal zoning actions that Ranson has undertaken in its attempt to industrialize the entire Jefferson Orchards site. The strategy of zoning an SDI and then eliminating the adjacent residential use shows intent to actively subvert both the Comprehensive Plan and the zoning ordinances. This too is in violation of West Virginia law.

Finally, the city-wide zoning modifications recently made solely to accommodate the Rockwool plant are in fact an example of “spot zoning”, which is clearly defined and prohibited under zoning codes.

We ask that the individual members consider this letter and the poorly-written ordinance and ask themselves whether they feel that they have sufficiently reliable zoning information and knowledge to vote on the Ordinance as written.

This letter is submitted without waiver and with a reservation of all rights by the undersigned.

Respectfully Submitted,

The Adams Family of Hazelfield Farm

W.H. Adams
William S. Adams
Samuel Adams
Sarah Adams
Mary Adams Chatham
Walter Chatham
Mary Rozell
William Chatham
Sarah Roma Chatham
Alexander Chatham
Amelia Lanza

Exhibit A Original 2012 site zoning map

Exhibit B Current Application site zoning map

Added Circles with hatching indicate area required to be TOD,
not SDI

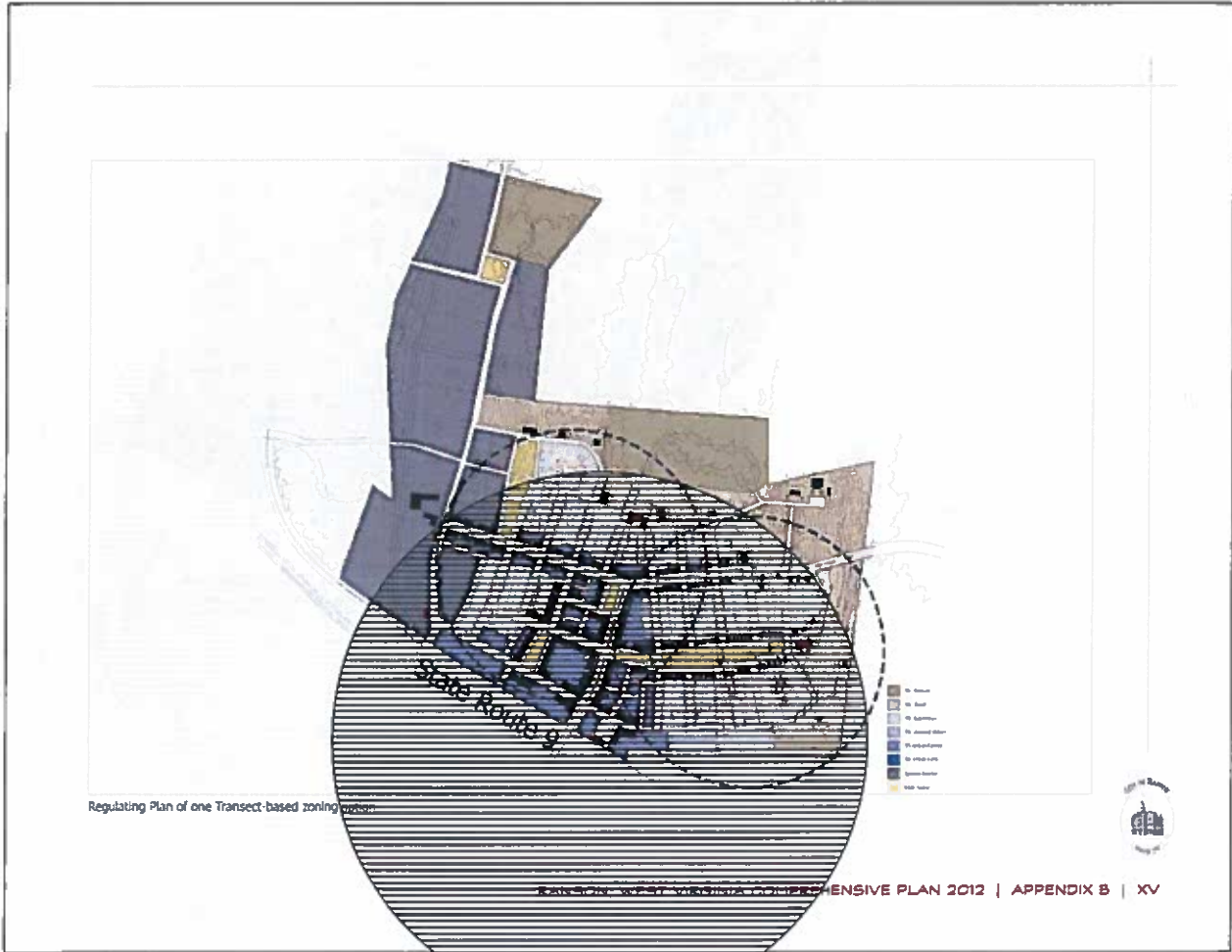


Exhibit A

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

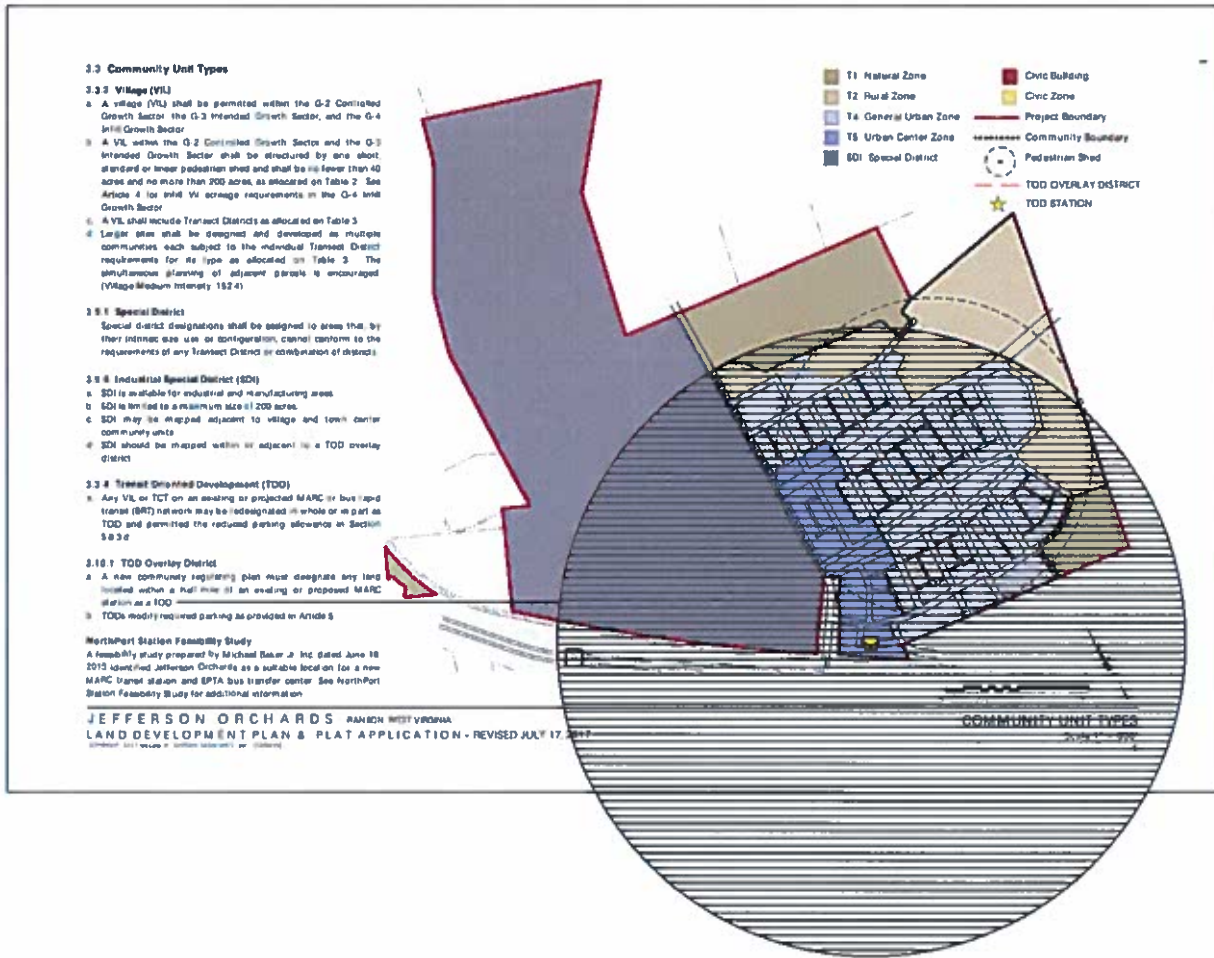


Exhibit B



Preserving America's Heritage

September 27, 2018

Mr. Jon T. Coleman
 Chief, Southern Section, Regulatory Branch
 Pittsburgh District Corps of Engineers
 William S. Moorhead Federal Building
 1000 Liberty Avenue, Suite 2200
 Pittsburgh, PA 15222

Ref: *Proposed Construction of Rockwool Insulation Plant
 Ranson, Jefferson County, West Virginia
 ACHPConnect Log Number: #013230*

Dear Mr. Coleman:

The Advisory Council on Historic Preservation (ACHP) recently received inquiries from a concerned citizen about the referenced undertaking and the status of the Corps of Engineers, Pittsburgh District (Corps) compliance with Section 106 of the National Historic Preservation Act (NHPA) [54 U.S.C. 306108] and its implementing regulations, "Protection of Historic Properties" (36 C.F.R. part 800).

As the ACHP has no record of notifications about this undertaking or determinations of adverse effects to historic properties, we would appreciate you apprizing us of the current status of this project, including steps the Corps has taken to comply with the requirements of Section 106, so that we may respond to the citizen.

We thank you in advance for your prompt attention to this matter. Should you have questions, please contact Dr. John T. Eddins at (202) 517-0211 or by email at jeddins@achp.gov.

Sincerely,

Jaime Loichinger
 Acting Assistant Director
 Federal Permitting, Licensing, and Assistance Section
 Office of Federal Agency Programs



June 27, 2018

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

HOA/Display

Kenneth J. Cammarato
Vice President/ General Counsel
Rockwool Group

Via email: Ken.Cammarato@rockwool.com.

RE: Granny Smith Lane Development Site, Kearneysville
FR# 17-437-JF- 10

Dear Mr. Cammarato,

We have received and reviewed the *Supplemental Architectural Assessment for the Granny Smith Lane Development Site (Jefferson Orchards), Kearneysville, Jefferson County, West Virginia (2018)*. This report was prepared for Roxul USA Inc. by Environmental Resources Management (ERM). As authorized by West Virginia Code 29-1-8 the duties of the historic preservation section include the authority to review all undertakings permitted, funded, licensed or otherwise assisted, in whole or in part, by the state for the purposes of furthering the duties of the section. Accordingly, please accept the following:

Evaluation of National Register Eligibility

My office previously provided comments regarding the *History/Architecture Survey for the Proposed Development Parcel-Granny Smith Lane (2017)* survey report prepared by Weller & Associates, Inc. Of the four Criteria of Evaluation, that report only provided an evaluation of eligibility according to Criterion C for resources within the Area of Potential Effect (APE). As requested in our letter dated October 3, 2017 to Weller & Associates, ERM's supplemental report addresses Criteria A and B. The supplemental report also provides a historical context for the agricultural industry of Jefferson County, primarily focusing on commercial fruit orchards. This additional information provides the basis to assess the historic significance of the cultural resources within the APE and evaluate eligibility for listing in the National Register of Historic Places (NRHP).

JF-0078-0003 (Stewart House and Orchard, 410 Granny Smith Lane)

The report provides a summary of the integrity of the remaining buildings on the property. The original house has been altered with two additions and changes in material including aluminum siding and replacement windows. The outbuildings are damaged, demolished, or otherwise lack integrity, or in the case of the bunkhouse, is less than 50 years old. The report states that this orchard complex is not the most closely associated with the Stewart family. The current condition of the orchard and associated buildings do not demonstrate their significance in a coherent and complete manner thereby impacting their historic integrity. The consultant concludes the property does not meet Criteria A, B, or C for listing in the National Register of Historic Places (NRHP). Based upon the information provided, we concur this property is not eligible for listing in the NRHP.

JF-0078-0055 (129 Oak Tree Road)

The main building associated with this address does not display any distinctive characteristics and lacks architectural significance due to alterations and the addition of replacement materials compromising its historic integrity and design. No significant persons or events were found to be associated with the property. Based upon historic research, the consultant determined the property did not meet Criteria A, B, or C for listing on the NRHP. Based upon the information provided, we concur that this property is not eligible for listing in the NRHP.

June 27, 2018
 Mr. Kenneth J. Cammarato
 FR# 17-437-JF- 10
 Page 2

JF-0746 (5909 Charles Town Road)

This property is substantially altered with additions and new materials which compromises the integrity of material, design, and feeling. Due to these changes, it no longer conveys its association with the late 19th century African American community of Hart Town that existed in the area. No significant persons were identified. The consultant determined the property did not meet Criteria A, B, or C for listing on the NRHP. Based upon the information provided, we concur this property is not eligible for listing on the NRHP.

JF-0078-0067 (6001 Charles Town Road)

Historic research identified this property as within the community of Hart Town which was established shortly after the Civil War. However, this residence was built much later in 1906. The house is considerably altered with additions changing its footprint and with changes to the original siding. The modern mobile home on the property further diminishes the setting and feeling of the property, two aspects of historic integrity. No significant persons were found to be associated with the property. The consultant determined the property did not meet Criteria A, B, or C for listing on the NRHP. Based upon the information provided, we concur this property is not eligible for listing in the NRHP.

Assessment of Indirect Effects

Three National Register listed properties were identified within the vicinity of the project area. The report addresses the possibility of indirect effects to these resources.

Hazelfield (1633 Warm Springs Road) was listed in the NRHP in 1979 under Criterion C for the building's architectural significance. Of importance to the historic building's setting is the character of its immediate surroundings. Figure 7 provides a viewshed analysis depicting areas of potential project visibility. Hazelfield is shown at the edge of the .75-mile radius to the east of the project area. The consultant observed the current conditions of the property from the public right-of-way, without access to the property during the field work portion of the project. The screen of existing trees will minimize, although may not eliminate completely, the view of the chimney stack. (The property owner provided a rendering that suggests that the stack will be seen from the second story of the building.) Considering the distance, terrain, and foliage, the visual changes to the setting will not adversely affect the primary character defining features of the historic resource. Based upon the information provided, we concur with the consultant that there will be no adverse effect to Hazelfield.

Tackley Farm (7562 Charles Town Road) was listed in the NRHP in 1994 under Criteria A and C. At that time, the boundary focused on the complex of buildings within the farm. During the Section 106 review process for Route 9 improvements, the Keeper of the National Register of Historic Places (Keeper) determined additional agricultural fields NRHP-eligible and increased the NRHP boundary. During this current review, the consultant did not gain access to the interior of the property.

Without field verification, it is assumed that the main residence of the farm still conveys its architectural significance. However, the farm's agricultural integrity has been compromised with the loss of several outbuildings. It is no longer an active farm and aerial views show disturbance within the farm fields. Also, Figure 7 demonstrates that portions of the historic property will not view the Roxul Plant. The stack is nearly a mile away. It is the opinion of the consultant that the addition of new elements to the viewshed will have no adverse effect to the farm's historic significance. Based upon the information provided, we concur with the consultant that there will be no adverse effect to the Tackley Farm.

June 27, 2018
 Mr. Kenneth J. Cammarato
 FR# 17-437-JF- 10
 Page 3

The Rellim Farm (14866 Lectown Road) was listed in the NRHP in 1998 under Criterion A for its association with the history of the local orchard industry. Although the smokestacks will be visible from portions of the property, the consultant, who had no property access, determined from the public right-of-way and aerial photography that the view of the historic buildings on the property would be minimal. Again, Figure 7 demonstrates the limited visibility of the Roxul Plant from the historic resource. Like the other resources, the view of Rellim Farm is screened by terrain and vegetation. Considering the overall setting of the Rellim Farm, the consultant determined that the visual effect would be minimal and would have no adverse effect on the historic characteristics of Rellim Farm. Based upon the information provided, we concur with the consultant that there will be no adverse effect to Rellim Farm.

(Jefferson Orchard Cemetery) 46 JF 507

Finally, upon review of our project file, it appears that we may not have responded to the additional information provided for the cemetery (46 JF 507) located just outside the project area on the western edge. The cemetery contains approximately 53 burials, with the earliest burial dating to 1900 and the latest to 1994. Based upon information provided in the WV Cemetery Survey Form, it is our opinion that the cemetery does not meet Criterion Consideration D. It does not derive its primary significance from graves of persons of transcendent importance, from age, from distinctive design features or from association with historic events.

In conclusion, we appreciate the efforts of Rockwool Group and its consultant, ERM, to evaluate the inventoried resources according to Criteria A, B and C and to assess the potential indirect effects to Hazelfield, Tackley Farm and Rellim Farm. At this time, no further consultation is necessary regarding architectural resources; however, we ask that you contact our office if your project should change. If you have questions regarding our comments or the Section 106 process, please contact Ernest Blevins, Structural Historian, or me at (304) 558-0240.

Thank you for your cooperation.

Sincerely,



Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/EEB

Cc: Jeff Holland, ERM

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

THRASHER

June 5, 2017

Jefferson County Historic Landmark Commission
Post Office Box 23
Charles Town, West Virginia 25414

RE: WVSHPO Section 106 Review
Proposed Development Parcel – Granny Smith Lane
Route 9, Kearneysville, Jefferson County, WV
FR# 17-437-JF

To whom it may concern:

The Thrasher Group, Inc. (Thrasher) is submitting to your office notification of a proposed site development project near the intersection of USGS Charles Town, Martinsburg, Middleway, and Shepherdstown 7.5 minute quadrangles in Jefferson County, West Virginia (WV).

The Proposed Development Parcel – Granny Smith Lane project is located approximately 1.0 miles southeast of Kearneysville, northeast of Route 9, at approximate coordinates 39.375353°N, 77.877569°W; please see Figure 1: Site Location (USGS) and Figure 2: Site Location (Aerial), enclosed. The subject property boundary encompasses 145 acres and shows the preliminary extent of the proposed site development, which would mostly be designated for construction. The development of this site is conceptual at this time. The subject property boundary is the site of former orchard operations and the rows of cultivated trees shown in the aerial imagery are no longer present.

The project area and/or its view shed have been previously disturbed by agricultural, commercial, highway, industrial, and residential development and use. A review of the National Register of Historic Places (NHRP) indicated the following places as the closest historic listings:

1. Historic Place Name: Rellim Farm
Address: Leetown Road, Kearneysville, Jefferson County, WV
Geographic Coordinates: 39.3808, -77.88731
NPS Reference Number: 98001467
Date Listed: 12-04-1998
Approximately 0.36 air miles northwest from Proposed Project Site
2. Historic Place Name: Hazelfield
Address: Off CR 48/2, Shenandoah Junction, Jefferson County, WV
Geographic Coordinates: 39.37365, -77.85981
NPS Reference Number: 76001938
Date Listed: 12-12-1976
Approximately 0.73 air miles east from Proposed Project Site
3. Historic Place Name: Tackley Farm
Address: WV9, 2 mi. E of JCT w/ WV480, Shenandoah Junction, Jefferson County, WV
Geographic Coordinates: 39.36501, -77.86677
NPS Reference Number: 94001286
Date Listed: 11-04-1994
Approximately 0.62 air miles east from Proposed Project Site

THRASHER

Jefferson Co. Historic Landmark Commission
June 5, 2017
Page 2 of 2

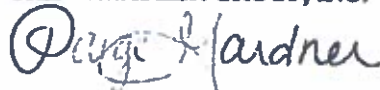
Additionally, the Division of Culture and History's GIS database revealed that a Phase I archaeological survey for FR#05-977-JF was previously conducted on approximately 40 acres in the southeast corner of the property when soil was removed during the construction of Route 9. One archaeological resource, 46JF501, was identified during that survey. This resource was determined not eligible for inclusion in the National Register of Historic Places.

The WV State Historic Preservation Office (SHPO) issued a correspondence letter, dated April 3, 2017, requesting a line-of-sight photograph log and keyed mapping of the proposed aboveground components of this project with the recommendation for the view shed anticipating 2-3 story buildings. The SHPO also expressed concerns that there may be unrecorded archaeological deposits present because mapping denotes the presence of buildings, including an early twentieth century farmstead, within the project area; also, Civil War skirmishes and troop movements took place in the vicinity. As a result, SHPO requested that a Phase I archaeological survey be conducted in the portions of the project area that have not previously been surveyed. Additionally, the SHPO recommended a copy of the submitted information for the project be provided to the Jefferson County Historic Landmark Commission, allowing the opportunity to comment on this project. Field work, including: view shed analysis, cemetery resource review, archaeological pedestrian survey, shovel testing and/or deep testing, and metal detector survey, commenced on May 15, 2017. Upon completion of the field work and any additional research that is conducted, a report of the investigation findings will be produced for submittal to the WVSHPO for review.

Federal regulations in 36 CFR 800.2(d)(1), 800.2(d)(2), 800.3(e), 800.6(a)(4), all stress the importance of public comment and involving local government representatives and organization that have demonstrated interest in historic preservation or the undertaking in the Section 106 review process. Therefore, we are forwarding a copy of the submitted information for the above-mentioned project to the Jefferson County Historic Landmark Commission to request your comments or opinions on this matter. Please respond with any comments, concerns, opinions or questions regarding the Proposed Development Parcel – Granny Smith Lane project within thirty (30) days of the date of this letter to the contact information below:

The Thrasher Group, Inc.
Mrs. Paige Gardner, *Environmental Scientist*
600 White Oaks Boulevard
Bridgeport, WV 26330
(304) 423-5318
pa Gardner@thrashereng.com

Sincerely,
THE THRASHER GROUP, INC.



PAIGE GARDNER
Environmental Scientist

Enclosures (2):
Figure 1: Site Location Map (USGS)
Figure 2: Site Location Map (Aerial)

Kender, Carolyn M

From: Paige E. Gardner <pgardner@thethrashergroup.com>
Sent: Tuesday, July 25, 2017 9:03 AM
To: Blevins, Ernest E
Cc: Kender, Carolyn M; jvosvickww@wellercrm.com
Subject: RE: FR#17-437-JF Granny Smith Lane, Kearneysville
Attachments: 20170724_PrpsdDvlpmnt_GrnnySmthLn_SHPO.pdf

Good morning Ernie,

I hope this email finds you well; thank you very much for sending over the consultation letter in response to the Phase I Archaeological Survey and Report that was completed for the Granny Smith Lane Property in Kearneysville, WV by Weller & Associates, Inc. (Weller).

Architectural Resources:

You're correct, the project's proposed height was recently determined to exceed the originally recommended 3-5 story survey and will therefore involve additional field work, research, and an amended architectural report. The fieldwork for this project has been completed but the deed research (and other research) is currently being conducted. Upon completion of the amended report, it will be submitted to your office for additional comments and review.

Cemetery Resources:

Additionally, Weller has completed the evaluation of cemetery 46JF507 requested by the SHPO; it was covered in the original architectural documents Weller put together. However, that document was not submitted in lieu of the new height determination that changed the view shed requirements. The cemetery documents will be submitted with the new architectural report when it is sent to your office.

Public Comments:

Pursuant of Section 106 Clearance and per SHPO correspondence letter dated April 3, 2017, Thrasher is writing to your office to indicate that we did not receive comments, concerns, opinions, or questions from the Jefferson County Historic Landmark Commission within the thirty (30) day comment window regarding the Proposed Development Parcel – Granny Smith Lane Project, FR #17-437-JF. Please see attached letter and corresponding submittal for your reference and records.

Please let me know if you have any further comments/concerns/questions at this time; thank you for your continued help with and review of this project. Have a great day!

Sincerely,

PAIGE GARDNER

Environmental Scientist | The Thrasher Group, Inc.
 office: 304-423-5318 | 800 273-6541
 mobile: 304-918-7291
 fax: 304-624-7831
www.thethrashergroup.com

From: Blevins, Ernest E [mailto:Ernest.E.Blevins@wv.gov]
Sent: Friday, July 21, 2017 10:28 AM
To: Paige E. Gardner; Jvosvick@wellercrm.com
Cc: Kender, Carolyn M
Subject: FR#17-437-JF Granny Smith Lane, Kearneysville



October 5th, 2017

William Howard Adams
 Sarah Woodbury Adams
 William Stephen Adams
 City of Ranson City Council
 City of Ranson Planning Commission
 Maria Dula, Associate Planner
 City of Ranson Department of Community Development

Dear Adams family and honorable Jefferson County officials,

Thank you for the time and care you put into your letter of concern. We have a long history of not only meeting but exceeding federal, state and local environmental regulations; our newest plant will be no different. After spending much time in the Jefferson County area, we know well how the peaceful and picturesque setting is cherished by residents and visitors alike. We also understand how important agriculture is to the region, and would never want to impede on another industry.

Based on our research, it appears that your property is a little more than half a mile away from our property, with a thick tree line between us. Your property also looks to sit below ours, and we believe that positioning will keep us out of your view.

Throughout the necessary regulatory steps, we will continue working with the relevant parties to ensure we remain good neighbors. We are part of the communities we build in, with ties to local charities and civic organizations. Our products are environmentally friendly, and their production is environmentally safe. We have several corporate policies we plan to enact at our Ranson facility, such as low-emissions forklifts and a no-idling policy for all vehicles. Your concerns about sound, lighting and color are certainly important to us, and as we complete the due diligence to begin plant construction, we will continue to review those requests as well as any others we may receive throughout the process.

Thank you again for taking the time to share your thoughts with us. We appreciate your understanding of the benefits we will bring to Jefferson County, and you have our word that we will continue to welcome input and update you and the community as we proceed.

Sincerely,

Leslie McLaren
 NA Government Affairs & Corporate Communications

ROXUL Inc. 8024 Esquesing line, Milton, Ontario L9T 6W3
 T: 1-800-265-6878 E: contactus@roxul.com www.roxul.com

October 9, 2017

Leslie McLaren,
North American Communications Manager
Roxul, US

Re: Roxul Plant, City of Ranson, WV

Dear Ms. McLaren,

Thank you for your letter of October 5th. We appreciate your prompt response and Roxul's history of meeting or exceeding environmental regulations particularly where, as here, the creation of the Roxul plant is such a significant and fundamental departure from the land use of all of its neighbors in the surrounding area.

I'd like to follow-up on a couple of points you make in your letter:

1. You say that the positioning of the Plant roughly 900 yards from our property, together with a thick tree line between the two, will keep the plant out of view. By our own calculations, while the 110'-tall Plant itself *may* be out of view, it appears that any chimneys or similar structures that exceed that height will be fully visible, along with any aviation warning lights that would be attached. And the heightened elevation of the Plant will serve to make it more visible – not less.

Has Roxul made its own study of the visibility of the Plant and the chimneys as they relate to surrounding properties that supports your belief that the Plant will not be visible? Has Roxul made every effort to limit the number and height of chimneys? And is the tree line that you refer to located on Roxul property, that it will agree to maintain, or is that not under Roxul's control and thus subject to potential removal?

2. In our letter of September 28, we raised concerns about noise and light produced by the Plant – especially a plant operating around the clock – and asked that Roxul both berm and heavily plant the eastern edge of its property, use darker paving and minimize the amount and intensity of the exterior lighting. This would benefit not only us but the future mixed-use community planned for the eastern portion of the Orchards Property. Apart from reviewing our request, is Roxul able to make any specific commitments on these issues to its new neighbors?

3. You mention that Roxul is undertaking due diligence before initiating construction of the Plant. We ask that you share with the community the due diligence you have undertaken with regard to the issues raised above.

We would greatly appreciate more specific responses to the issues raised in this and our earlier letter and hope that we can continue to have a productive dialogue with you and with

2. Lighting

- A. Due to the height of the structure (11 Stories) and the additional multiple chimney heights, lighting is our chief concern- not just for our sake but for the entire community. We understand that the Roxul Tower block will be enclosed, so that it will not look like the over-lit cement plant in Martinsburg, but it has windows and presumably some exterior lighting on the building; in addition to the aircraft warning lights that are required. We request that the City of Ranson does all that can do to insist that the lighting be kept to a minimum as a part of their technical review and that Roxul does all that it can do to minimize the impact of lighting on the adjacent community.
- B. The vast expanse of paving on the site will reflect a great deal of the light which falls on it at night if the lighting and paving are not properly designed. The result of this will be an intensely lit sky, especially on cloudy nights. We have all seen the effect that up-lighting clouds has on an area- it changes it from rural to urban. Shielding the source on pole-mounted lighting does not solve this problem, since it is the intense down-light striking the pavement that causes the phenomenon. This can be avoided by specifying darker paving and minimizing light intensity. Again, we request that the City of Ranson and Roxul do everything that they can to avoid light-spillage; especially unintentional up-lighting of clouds.

3. Color

The main block of the Roxul Plant is approximate the size of an 11 Story building similar in mass to a typical K Street office building in Washington D.C. It will be visible for many miles; like the Martinsburg Cement Plant tower. We request that Roxul be asked to use a medium darkish tone, subdued color for the mass of the building. The Mississippi plant is a light beige color and is highly visible. Medium to dark grey is generally successful; especially in a flat (not shiny) finish.

This is not meant to be an exhaustive list of all of the issues related to a successfully designed plant, just a request from concerned neighbors that a few often-overlooked issues be addressed properly for the benefit of all.

Respectfully Submitted,

William Howard Adams
Sarah Woodbury Adams
William Stephen Adams

Mary Adams Chatham
Walter Chatham

City of Ranson City Council
 City of Ranson Planning Commission
 Maria Dula, Associate Planner
 City of Ranson Department of Community Development
 Leslie McLaren, North American Communications Manager, Roxul US

September 28, 2017

Dear Elected Officials, City Staff & Leslie McLaren,

Our family owns Hazelfield Farm, the property immediately to the east of the Jefferson Orchards property which has been incorporated into Ranson. Hazelfield is listed on the National Register of Historic Places as well as documented by the Historic American Building Survey preserved in the Library of Congress.

We understand the importance to the community to have thoughtful, well-planned growth and we applaud the City of Ranson for their efforts to preserve a balanced environment where economic development is paired with the preservation of our truly exceptional and historic rural landscape. Our concerns are therefore related to preserving the peaceful and beautiful character of areas that remain agricultural, including ours.

Here are our major concerns, all of which can be addressed without creating a hardship:

1. Sound
 - A. The Roxul plant will operate 24 hours a day and will presumably have trucks entering and leaving at all hours. The noise from these trucks will spread and amplify in the open landscape. We request that the Eastern edge of the Roxul property be stagger-planted with dense evergreens and, if possible, bermed to provide sound mitigation. This would benefit all of the neighbors to the east of the plant as well as the future residents of the proposed mixed-use community proposed for the eastern portion of the Orchards Property.
 - B. The plant will presumably operate at the same noise levels as the Mississippi plant. There are no sound-mitigation notes of any kind on the documents that we have seen. We ask that the City of Ranson develops a criteria for limiting noise pollution if it does not already have one; and ask that Roxul agrees to limit sound pollution and, if it is too loud (per agreed-upon city-defined limits) once the plant is built and operating, that Roxul will provide whatever additional abatement is required to cure excessive sound and bring it down to the required "as yet to be specified" limits.

the City of Ranson to ensure both economic development and respect for the history and concerns of the neighboring properties.

Respectfully,

William Howard Adams
Sarah Woodbury Adams
William Stephen Adams
Mary Adams Chatham
Walter Chatham

Cc:

City of Ranson City Council
City of Ranson Planning Commission
Maria Dula, Associate Planner
City of Ranson Department of Community Development

CONFIDENTIAL

ROCKWOOL International A/S
Safety, Health, Environment & Quality

To: Participants Date: 2017-05-30
 From: Mette Meldahl Drejstel Ref: MMD/LKN
 Copy: No: SHEQ-17-0099

SHUTTLE – Minutes of meeting in Charleston on 23rd May 2017

Participants:

- WV State Economic Development: Todd Hooker & Tiffany Ellis-Williams
- Jefferson County Development Authority (JCDA): John Reisenweber
- City of Ranson (CoR): Andy Blake & Edward Erfurt
- Roxul: Peter Regenber
- ROCKWOOL International: Michael Aagaard & Mette Drejstel

Minutes

Site plan and zoning: The City of Ranson (CoR) gave an update on the submittals. An updated site plan application for re-zoning of approx. 185 acres was finally received from the owners (Gordon on behalf of Ralston) Friday. This application is in line with the city's plans.

Based on this the timeline for re-zoning is as follows:

- June: Workshop
- July: Planning commission
- August: Approval
- Site plan to be submitted 30 June; approval 22 September.

Discussion about the re-zoning and the purchase/sales agreement and deed restrictions:

Roxul has agreed with the seller to have deed restrictions for use of the rest of the land included in the purchase agreement. With the planned approach for re-zoning in 2 steps, the first focused on the purchased land, Roxul wants to have transparency towards the City of Ranson and its citizens that in the future there will be a change of land use from the current zoning showing mixed use to industrial use. The deed restrictions should be known. CoR confirmed that deeds are publicly available information.

CoR was under the impression that the agreement was to have "non-residential use". The agreement says: "must clearly limit use to heavy industrial use". Roxul will delete "heavy".

Project Shuttle000298

Packet Pg. 937

CONFIDENTIAL

ROCKWOOL International A/S
 Safety, Health, Environment & Quality
 SHEQ-17-0099
 2/2

It is very important for Roxul not to be a nuisance to our neighbours, and experience from our other factories shows that being in an industrial zone is required to avoid this. This has been clearly communicated throughout the entire land acquisition and development process. The search for land has been focused on this, and many other sites have been rejected due to the proximity to residential areas.

JCDA and CoR asked if it is possible to define "Industrial" in more details, as they would like to open up for more use as e.g. offices (call centre, IT centre etc.). The detailed list in the zoning plan can be used to discuss types of industry. Other types discussed were manufacturing, workshops, distribution centres and warehouses. These fall under industry in Roxul's perception, whereas offices do not. CoR has a concern to limit use as the city has no market intelligence to support development only in industry. The agreement made with CoR management (elected) is only to rezone to industrial use for the purchased land as a fast track.

JCDA would like to have a large industrial area but want to have flexibility in order to pay back the large public investment in the area, and flat land is not abundant.

Roxul was asked if the "Attainment analysis" for Jefferson could be shared with CoR/JDCA for the development plan. This will support planning for industry.

Currently, CoR only has the possibility to zone 200 acres for industrial (SDI: Special District Industrial) in an area.

Creating a new zoning district will be a revision with a comprehensive plan that encompasses a political decision.

CoR expressed a strong wish for the train station to remain in the plan. CoR mentioned that the Owner has signed an agreement with CSX which needs to be changed or terminated if not planned.

Change of deed for industrial purpose will include all owners of the land at the given time, meaning if other parts have been sold, the owners of these must also agree to the change.

The possibility of JDCA taking the role as Master developer if the seller is not interested in doing this was discussed.

Alternatively, it could be considered if the state is interested in developing a bigger area including adjacent land into industrial zone.

Mette Meldahl Drejstel

8/27/2018

Gmail - FR# 17-437-JF Granny Smith Lane, Kerneysville

V. Romanoff and Associates
<http://www.vromanoffandassociates.com>
 Restoration and Design Consultants

Blevins, Ernest E <Ernest.E.Blevins@wv.gov>
 To: Sarah Adams <sarahadams85@gmail.com>

Wed, Oct 18, 2017 at 2:19 PM

To understand the numbers the 17 is the fiscal year, the 437 is the order we got it, JF is the county. Our first response to the submission has no number, the second is 1, third is 2, etc.

If I can be of any further assistance, please contact me.

Ernest E. Blevins

From: Sarah Adams [mailto:sarahadams85@gmail.com]
 Sent: Wednesday, October 18, 2017 2:08 PM
 To: Blevins, Ernest E <Ernest.E.Blevins@wv.gov>
 Subject: Re: FR# 17-437-JF Granny Smith Lane, Kerneysville

[Quoted text hidden]

4 attachments

-  17-437-JF-4.pdf
287K
-  17-437-JF-6.pdf
536K
-  17-437-JF.pdf
775K
-  17-437-JF-2 & 17-347-JF-3.pdf
729K

Sarah Adams <sarahadams85@gmail.com>
 To: William Adams <wadamswil@gmail.com>, Walter Chatham <walter@wfchatham.com>

Wed, Oct 18, 2017 at 2:41 PM

These are the letters from WV regarding the Section 106 review.
 I haven't yet looked at them
 Please let me know if you have questions-I can call him.
 Thanks, Sarah

[Quoted text hidden]

4 attachments

-  17-437-JF-4.pdf
287K
-  17-437-JF-6.pdf
536K
-  17-437-JF.pdf
775K

8/27/2018

Gmail - FR# 17-437-JF Granny Smith Lane, Kerneysville

 17-437-JF-2 & 17-347-JF-3.pdf
729K

Sarah Adams <sarahadams85@gmail.com> Wed, Oct 18, 2017 at 3:59 PM
To: Maria Dula <MDula@ransonwv.us>, Edward Erfurt <eerfurt@ransonwv.us>
Cc: William Adams <wadamswil@gmail.com>, William H Adams <whadams@frontiernet.net>, mary chatham <madamschat2@gmail.com>, Walter Chatham <walter@wfchatham.com>, walter washington <swwash@comcast.net>

Dear Maria,

Based on these attached letters the required Section 106 review has not been completed and I am wondering how the Site Plan Review can be can be voted on without this process being completed?

in addition based on my phone call with the West Virginia Division of Culture & History





West Virginia State Historic Preservation Office it appears that Hazelfield Farm did not show up on their mapping and obviously with this new information there will need to be further review.

Please let me know that you have received this email and let me know what the Planning Commission intends to do with this information.

Sincerely, Sarah Adams

[Quoted text hidden]

4 attachments

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729K

Sarah Adams <sarahadams85@gmail.com>
To: spfaltzgraff@ransonwv.us

Wed, Oct 18, 2017 at 4:34 PM

Please pass this on the Planning Commission and City Council.

Thank you.

Sarah Adams

----- Forwarded message -----

From: Sarah Adams <sarahadams85@gmail.com>

Date: Wed, Oct 18, 2017 at 3:59 PM

Subject: Fwd: FR# 17-437-JF Granny Smith Lane, Kerneysville

[Quoted text hidden]

--
V. Romanoff and Associates
<http://www.vromanoffandassociates.com>
Restoration and Design Consultants

4 attachments

8/27/2018

Gmail - FR# 17-437-JF Granny Smith Lane, Kerneysville

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-  17-437-JF-2 & 17-347-JF-3.pdf
729K

Andy Blake <ABlake@ransonwv.us>

Wed, Oct 18, 2017 at 6:53 PM

To: Stacey Pfaltzgraff <SPfaltzgraff@ransonwv.us>, Maria Dula <MDula@ransonwv.us>, Edward Erfurt <eerfurt@ransonwv.us>, "sarahadams85@gmail.com" <sarahadams85@gmail.com>

Ms. Adams:

Thank you for your correspondence. It was shared with the Planning Commission. The City of Ranson does not require Section 106 review as part of site plan approval.

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies, including NEH, to consider the effects of Federally funded projects on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on such projects prior to the expenditure of any Federal funds.

Roxul is not a federally funded project and Ranson does not require Section 106 review.

It is the city's understanding that Roxul is completing section 106 review for their air permit required by federal regulations and that this review is underway. Federal rules will require the issuance of an air permit prior to vertical construction of the building and issuance of the building permit. Roxul has applied for this permit with the requisite federal agencies. The air permit is outside the jurisdiction of the City of Ranson.

The approval of the site plan does not alleviate the need for a building permit. It simply allows for Roxul to apply for the site improvement permit for horizontal construction. A building permit for vertical construction will not be issued until Roxul obtains all necessary reviews and third party approvals.

Thank you,

Andy Blake
City Manager.

[Get Outlook for iOS](#)

From: Sarah Adams [mailto:sarahadams85@gmail.com]

Sent: Wednesday, October 18, 2017 4:35 PM

To: Stacey Pfaltzgraff <SPfaltzgraff@ransonwv.us>

[Quoted text hidden]

[Quoted text hidden]

Sarah Adams <sarahadams85@gmail.com>
To: "Blevins, Ernest E" <Ernest.E.Blevins@wv.gov>

Wed, Oct 18, 2017 at 8:50 PM

This is the City of Ranson's response to my email. Are they correct?
Thanks, Sarah

8/27/2018

Gmail - FR# 17-437-JF Granny Smith Lane, Kerneysville

----- Forwarded message -----

From: Andy Blake <ABlake@ransonwv.us>
 Date: Wed, Oct 18, 2017 at 6:53 PM
 Subject: Re: FR# 17-437-JF Granny Smith Lane, Kerneysville
 [Quoted text hidden]
 [Quoted text hidden]

Blevins, Ernest E <Ernest.E.Blevins@wv.gov>
 To: Sarah Adams <sarahadams85@gmail.com>

Thu, Oct 19, 2017 at 10:39 AM

Thanks. I wanted to let you know I got this. We are continuing to look into the matter. As Susan Pierce said in our brief call this morning we'll keep you posted.

Ernie

Ernest Everett Blevins, MFA
 Structural Historian for Review & Compliance
 West Virginia Division of Culture & History
 West Virginia State Historic Preservation Office
 1900 Kanawha Boulevard East
 Charleston, West Virginia 25305
 304-558-0240, ext. 726
 ernest.e.blevins@wv.gov

From: Sarah Adams [mailto:sarahadams85@gmail.com]
 Sent: Wednesday, October 18, 2017 8:51 PM
 To: Blevins, Ernest E <Ernest.E.Blevins@wv.gov>

[Quoted text hidden]

[Quoted text hidden]

Sarah Adams <sarahadams85@gmail.com>
 To: "Blevins, Ernest E" <Ernest.E.Blevins@wv.gov>

Fri, Oct 20, 2017 at 11:32 AM

Good morning!
 I don't mean to bother you-just wondered if there are any updates?
 Best, Sarah Adams
 [Quoted text hidden]

Blevins, Ernest E <Ernest.E.Blevins@wv.gov>
 To: Sarah Adams <sarahadams85@gmail.com>

Fri, Oct 20, 2017 at 11:50 AM

8/27/2018

Gmail - FR# 17-437-JF Granny Smith Lane, Kerneysville

Nothing much to report but I can get you an update. We did find the property on our GIS. One it was on an HPI form which is a green icon which covered the purple NR form until zoomed in close enough to see both. This explains why looking for the NR form I couldn't find the purple icon to pull it up thus making me think it wasn't there.

Secondly the consultant had the area of potential effects end at the tree line. So really they didn't apparently look where the property is.

That said, we have talked to the project client who hired the subconsultant to have the subconsultant address NR listed Hazelfield.

I don't have a problem with update requests.

Ernie

Ernest Everett Blevins, MFA
 Structural Historian for Review & Compliance
 West Virginia Division of Culture & History
 West Virginia State Historic Preservation Office
 1900 Kanawha Boulevard East
 Charleston, West Virginia 25305
 304-558-0240, ext. 726
 ernest.e.blevins@wv.gov

From: Sarah Adams [mailto:sarahadams85@gmail.com]

Sent: Friday, October 20, 2017 11:33 AM

[Quoted text hidden]

[Quoted text hidden]

Sarah Adams <sarahadams85@gmail.com>

Fri, Oct 20, 2017 at 12:18 PM

To: William Adams <wadamswil@gmail.com>, William H Adams <whadams@frontiernet.net>, mary chatham <madamschat2@gmail.com>, Walter Chatham <walter@wfchatham.com>

Here's the latest from the State Hist. Preserv. Office.

----- Forwarded message -----

From: Blevins, Ernest E <Ernest.E.Blevins@wv.gov>

[Quoted text hidden]



Sarah Adams <sarahadams85@gmail.com>

All WV SHPO letters re: ROXUL






3 messages

Sarah Adams <sarahadams@fitg.net>
To: William Adams <wadamswil@gmail.com>

Wed, Aug 29, 2018 at 5:03 PM

--
V. Romanoff and Associates
<http://www.vromanoffandassociates.com>
Restoration and Design Consultants

5 attachments

-  WV SHPO letter 04-03-17.pdf
287K
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-  WV SHPO 07-19-17.pdf
729K
-  WV SHPO letter 10-03-17.pdf
536K
-  WV SHPO letter 06-27-18.pdf
1333K

William Adams <wadamswil@gmail.com>
To: Sarah Adams <sarahadams@fitg.net>

Wed, Aug 29, 2018 at 5:53 PM

Sarah,

The July 19 and Aug 18, 2017 letters both say that SHPO understands that the project has a design change and will "involve several components that are over 100 feet in height". Did Roxul provide more detail on the actual height (twice as high)? and did it supply accurate info to the landmark commission? Note also in the Aug letter it says "we note that your office sent a letter about the proposed project to the [JCHLC] on June 5, 2017. As of July 25, 2017, no response has been received." Maybe you want to provide this detail to Mr. Burke?

Bill
[Quoted text hidden]

Sarah Adams <sarahadams@fitg.net>
To: William Adams <wadamswil@gmail.com>

Wed, Aug 29, 2018 at 7:03 PM

Yes-I too noticed the detail about the smokestacks.
I have asked Mr. Burke for more details.
[Quoted text hidden]

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)



April 3, 2017

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AAE Employer

Matt Hurst, Ph.D.
Associate Engineer
ERM, Inc.
204 Chase Drive
Hurricane, West Virginia 25526

RE: Proposed Development Parcel – Granny Smith Lane, Kearneysville
FR# 17-437-JF

Dear Mr. Hurst:

We have reviewed the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to the submitted information, the project will result in the development of a parcel of land located along Route 9 near Kearneysville in Jefferson County. The limits of disturbance (LOD) is estimated at 150 acres, of which approximately four acres are comprised of former apple orchard trees.

Architectural Resources:

We cannot complete our review with the information submitted. Please forward photographs of any buildings and/or structures that will be within the project area and within the line-of-sight of the proposed above ground components of this project. We understand that the development of this site in conceptual at this time and it appears this is an effort to complete compliance to attract developers. There are several previously recorded properties on our WV SHPO GIS (<http://mapwv/shpo>) that if still standing will need updated information to determine if they are still eligible for the National Register of Historic Places. If there are no solid proposals and you wish to more forward we recommend for the view shed anticipating 2-3 story buildings. These photographs should be keyed to a USGS topographic map. We will provide additional comments upon receipt of the requested information; however, we reserve the right to request additional information, including the completion of Historic Property Inventory (HPI) forms.

Archaeological Resources:

Our records indicate that portions of the current project area underwent a Phase I archaeological survey for FR# 05-977-JF. One archaeological resource, 46JF501, was identified during that survey. This resource was determined not eligible for inclusion in the National Register of Historic Places.

However, the prior survey work does not investigate the entire current project area. Aerial photographs and project mapping denote the presence of buildings, including a early twentieth century farmstead, within the project area. Also, Civil War skirmishes and troop movements took place in the project area vicinity. As a result, we have concerns that there may be unrecorded archaeological deposits present. We, therefore, request that a Phase I archaeological survey be conducted in the portions of the project area that were not previously surveyed. The phase I survey should include a metal detector survey. We will provide further comment upon receipt of the resulting Phase I archaeological survey technical report.

April 3, 2017
 Dr. Hurst
 FR# 17-437-JF
 Page 2

Cemetery Resources:

Our records and project mapping note the presence of a cemetery, 46JF507, immediately adjacent to the project area. This cemetery does not have a determination of eligibility for the National Register of Historic Places at this time. Since it presently not in the direct footprint of the project area only the viewshed would have to be evaluated should the cemetery be determined eligible. We will provide further comment upon receipt of the additional information

Public Comments:

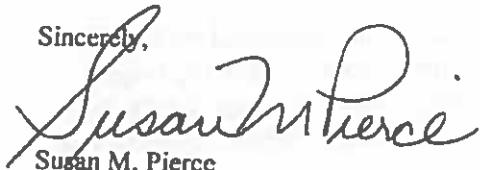
In addition, federal regulations in 36 CFR 800.2(d)(1), 800.2(d)(2), 800.3(e), 800.6(a)(4) all stress the importance of public comment during the Section 106 process. If you have already completed this aspect of the requirements under Section 106, please provide written documentation of that along with any comments you have received. If you have not already done so, please forward a copy of the submitted information for the project to Jefferson County Historic Landmark Commission, allowing them the opportunity to comment on this project. Below is their contact information. Please forward any comments that you receive to this office. If you receive no comments, please indicate that *in writing* to this office. Please contact the below for further information.

Jefferson County Historic Landmark Commission
 Post Office Box 23
 Charles Town, West Virginia 25414

In addition to our usual comments, your letter requested "recommendations for the potential development on this property." It is our opinion, beyond the concerns mentioned above, that we do not have an interest in making specific recommendations for development this property at this time.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact, Carolyn Kender, Archaeologist, or Ernest E. Blevins, Structural Historian at (304) 558-0240.*

Sincerely,



Susan M. Pierce
 Deputy State Historic Preservation Officer

SMP/CMK/EEB



The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEQAA Employer

July 19, 2017

Mr. Matt Hurst, Ph.D
ERM, Inc.
204 Chase Drive
Hurricane, West Virginia 25526

RE: Proposed Development Parcel – Granny Smith Lane, Kearneysville
FR# 17-437-JF-2 and 17-437-JF -3

Dear Mr. Hurst:

We have reviewed the additional information submitted by Weller & Associates, Inc. for the above referenced project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to the submitted information, the project will result in the development of a parcel of land located along Route 9 near Kearneysville in Jefferson County. The limits of disturbance (LOD) is estimated at 150 acres, of which approximately four acres are comprised of former apple orchard trees. We understand that the project has undergone a design change and will involve several components that will be over 100 feet in height.

Archaeological Resources:

We have reviewed the Phase I Archaeological Survey report prepared and submitted by Weller & Associates, Inc. for the above referenced project. Systematic survey conducted in the project area identified one isolated prehistoric find (46-JF-614), a secondary flake. We concur with the consultant's conclusion that this resource lacks research potential and is not eligible for inclusion in the National Register of Historic Places.

The report also notes that a controlled metal detector survey was conducted in the project area due to the project's proximity to the Kearneysville Civil War battlefield area. No Civil War-era artifacts were recovered. The report indicates that all of the metal detector hits were modern debris (i.e, cans and plow parts).

In our opinion, no archaeological historic properties will be affected by the proposed project. No further consultation is necessary with respect to archaeological resources.

Architectural Resources:

It is our understanding that the project has changed and will involve writing a new architectural report. We will provide additional comments upon receipt of the new report.

July 19, 2017
 Dr. Hurst
 FR# 17-437-JF-2 & 17-437-JF-3
 Page 2

Cemetery Resources:

Our records and project mapping note the presence of a cemetery, 46JF507, immediately adjacent to the project area. This cemetery does not have a determination of eligibility for the National Register of Historic Places at this time. Since it presently is not in the direct footprint of the project area only the viewshed would have to be evaluated should the cemetery be determined eligible. We will provide further comment upon receipt of the additional information.

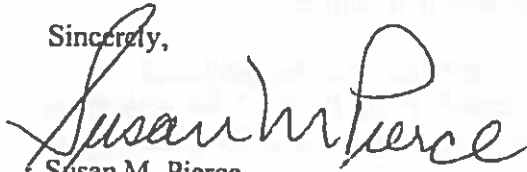
Public Comments:

In addition, federal regulations in 36 CFR 800.2(d)(1), 800.2(d)(2), 800.3(e), 800.6(a)(4) all stress the importance of public comment during the Section 106 process. If you have already completed this aspect of the requirements under Section 106, please confirm in writing along with any comments you have received. If you have not already done so, please forward a copy of the expanded project information to the Jefferson County Historic Landmark Commission, allowing them the opportunity to comment on the revised project. Below is their contact information. Please forward any comments that you receive to this office. If you receive no comments, please indicate that *in writing* to this office. Please contact the below for further information.

Jefferson County Historic Landmark Commission
 Post Office Box 23
 Charles Town, West Virginia 25414

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact, Carolyn Kender, Archaeologist, or Ernest E. Blevins, Structural Historian at (304) 558-0240.*

Sincerely,



Susan M. Pierce
 Deputy State Historic Preservation Officer

SMP/CMK/EEB

CC: Ms. Paige Gardner – The Thrasher Group, Inc.
 Mr. James Vosvick – Weller Associates, Inc.



The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO AA Employer

August 18, 2017

Ms. Jacquelyn Lehman
Weller Associates
PO Box 6005
Wheeling, West Virginia 26003

RE: Proposed Development Parcel – Granny Smith Lane, Kearneysville
FR#: 17-437-JF-4

Dear Ms. Lehman:

We have reviewed the additional information submitted for the above-mentioned project to determine its effects to cultural resources. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, the project will result in the development of a parcel of land located along Route 9 near Kearneysville in Jefferson County. The limits of disturbance (LOD) is estimated at 150 acres, of which approximately four acres are comprised of former apple orchard trees. We understand that the project has undergone a design change and will involve several components that will be over 100 feet in height.

We note that your office sent a letter about the proposed project to the Jefferson County Historic Landmarks Commission on June 5, 2017. As of July 25, 2017, no response had been received. We understand that any further correspondence or comments will be sent to our office.

We will provide further comments regarding this project upon the submission of the additional fieldwork and cemetery evaluation, as noted in Paige Gardner's email of July 25, 2017. We reserve the right to request additional information, including the completion of Historic Property Inventory forms.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Benjamin M. Riggle, Structural Historian, at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/BMR

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)



The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AA Employer

October 3, 2017

Mr. James Vosvick
Weller & Associates
Post Office Box 605
Wheeling, West Virginia 26003

RE: Proposed Development Parcel – Granny Smith Lane, Kearneysville
FR# 17-437-JF-6

Dear Mr. Vosvick:

We have reviewed the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, the proposed project will result in the development of a parcel of land located along Route 9 near Kearneysville in Jefferson County. The limits of disturbance (LOD) is estimated at 150 acres, of which approximately four acres are comprised of former apple orchard trees.

Architectural Resources:

As you know, evaluation of National Register eligibility considers four different criteria. While Criterion C was considered, the report does not demonstrate that Criteria A and B were; therefore, we request further information regarding the historic context of the resources identified as AL-2, the William Steward House and springhouse (AL-3), AL-4, AL-8, and AL-9. Previous reviews in this area considered the agricultural history, and houses such as those included were previously identified as farm tenant houses. Please conduct research regarding the history of these buildings to evaluate the National Register of Historic Places Criteria A and B as part of the Historic Property Inventory forms and report. The report bibliography shows only Jefferson County tax records were considered. Please contact Michael Burdette, of our office, for Report BY-22. This is a historical context study for Berkeley County which contains a bibliography that may be useful for your study. We also require that an appropriate professional meeting the National Park Service qualifications conduct the evaluation.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Ernest E. Blevins, Structural Historian, at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/EEB

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

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Andy Blake to Jeff Orchards rep Ralston re federal funding source for planning

From: Andy Blake
Sent: Monday, May 14, 2018 6:11:14 PM
To: Mark Ralston; Nic Diehl
Cc: Edward Erfurt
Subject: Jefferson Orchards

Good afternoon Mark:

Nic has informed us that you are coming to town next week and would like to meet. You had mentioned that you were coming to town. We will make ourselves available. I think it would be most productive if we had an agenda of what specifics you would like to speak about to make it productive. I see a couple of issues as we have previously discussed:

1. Northern orphaned parcel: This parcel is now part of Rockwool so that the northern piece isn't orphaned with the intent to be deeded back to the Orchards. This parcel needs to be merged with your newly acquired piece through a merger plat. It then can be rededicated back to the Orchards. The newly acquired piece should be annexed. This is a simple process that requires your consultants to simply turn in the application and required paperwork.

2. Planning – As you know, in 2012, Jefferson Orchards was selected for a complete rezoning and land development plan free of charge to the landowner through a federal and local HUD Challenge Planning Grant. The site was envisioned and planned as a transit oriented development with about a 1/3 zoned special district industrial. This is the zoning that Rockwool took advantage of and probably consisted of about \$100,000 in free planning that resulted in a completely vested and approved plan by the Planning Commission and Council. It's the plan that still exists today. There has been an expressed desire by you to allow industrial on the entire remaining parcel. While this may be possible with an ordinance change, zoning is just one aspect of the two step planning process within the City. The City requires underlying zoning plus a land development plan. The land development plan is the vested land use document that goes to public hearing and sets out road networks, utility corridors, environmentally sensitive areas, land days utilizing best land use analysis. The best example of this is your own land development plan. Simply, it requires a vision – providing enough flexibility to allow uses while setting up some certainty and flexibility. There are planning firms across the country that focuses on this type of development and process. The same type of process needs to occur again if you plan on re-entitling the property to another plan.

While the City isn't able to pony up additional funds to once again plan Jefferson Orchards, we learned last week that the City does have the ability to apply for 2 grants that could plan the Orchard and surrounding site. Our consultant is currently writing a summary of the process for applying for these grants. One grant is through the US EDA up to \$300,000 to conduct a market study and land planners plan the Orchards, Tackley Mill, Blackford Village presenting a fully vested plan that is publicly vetted and development ready. This grant has a rolling deadline and does require a match.

The City would be willing to administer this but would be looking for a monetary contribution by the

B014626

land owner(s). The second grant is called BUILD (formerly TIGER Planning Grant) which could be applied for to design and engineer the rest of the road, bike path and the train station (if it is found feasible by the market study and analysis).

I have spoken to City Council and the Planning Commission about this area. They are open to ideas, but consistent with our land use regulations, it requires a plan. The Council would like to see a holistic approach that takes into consideration your land along with surrounding properties. It's almost 1,500 acres of land. Some properties could be ripe for larger scale manufacturing. Other areas not so much- which can serve as support uses for the larger scale manufacturing. The Council (along with myself) isn't necessarily keen on calling the area an industrial park especially given the City's two decade history of cleaning up turn of the century dirty industrial sites and the fact that development patterns that focus solely on industrial parks have changed in the last 20 years. The Council is very much accommodating to high-tech and clean manufacturing and research – like Rockwool and the potential user to Rockwool's north- along with other compatible uses. But, to put it as simply as we can, we need a solid vision and plan.

Many thanks

Andy

From: Matt Ward
To: Mark Ralston; Andy Blake; Edward Erfurt; "Nic Diehl"; Duke Pierson; "Mark Dyck (mdyck@gordon.us.com)"; Ashley Badesch
Subject: RE: Jefferson Orchard and surroundings
Date: Wednesday, June 6, 2018 7:06:15 PM
Attachments: JOB Hub Briefing Sheet.pdf
Importance: High

June 6, 2018

Hello all –

This email is my effort to confirm some of the key details and options, and propose an approach forward, on land use and infrastructure plans for a manufacturing and commercial development at Jefferson Orchards and surrounding land. Please try to review this before our 1:30pm call on Thursday, June 7. **To participate in the call, dial 800-582-3014, code 93539085#.**

EDA Grant

1. As previously discussed in emails, in my phone call with MarkR yesterday, and my meeting with Andy Blake and Edward Erfurt in the city today, we have the opportunity to obtain up to \$300,000 in EDA Planning Grant funds for a “Development & Manufacturing Master Plan” for the Jefferson Orchards, Miller Farm, and potentially other adjacent properties. EDA’s West Virginia representative is favorable to a request. Also, an EDA Planning grant should position the project nicely for an EDA Public Works grant, which can be for ~\$1M to \$2M for infrastructure (roads, water, sewer, etc.).
2. We understand that Jefferson Orchards is keen to have a development master plan and market strategy for recruiting the right kind of manufacturing. Ranson believes this is essential too, as the development of these lands in Ranson (under annexation) must, under code, include the application of comprehensive plan and zoning to the land to support the manufacturing/commercial uses, and meet various legal and development standards. I understand that Rockwool is also interested in an overall master plan for future manufacturing development.
3. A master plan could/should include these elements, some of which will be legally required and some of which are desirable for the optimal development potential. I believe that most if not all of these activities could be part of an EDA grant scope:
 - a. A **master concept plan** for development that includes placement of manufacturing pads, supportive commercial/retail facilities, potentially workforce housing, and necessary infrastructure. This master concept plan must support a development that meets local and state code, and the expected requirements of the future buyers/users of the property.

There could be a charrette of key parties to gain consensus on the development plan, including City agencies, Jefferson County Development Authority, WV Development Office, WV DOT, HEPMPO, Region 9, etc. Perhaps biking/trails groups. To the extent that we believe that certain aspects of the proposed development could attract public ire (for example, Shepherdstown-area folks who do not want disturbances on Route 480), this process could engage these folks too, to try to get their input and minimize their concerns.

- b. The development of language to include in the **Ranson Comprehensive Plan**, as there is no real concept/zone/model for this kind of industrial park development under the current plan.
- c. A **manufacturing strategy** that assesses the kinds of manufacturing that is best suited for these lands, opportunities for cluster development and co-location (e.g., Rockwool Growing Medium, waste CO2 and waste heat in an adjacent organic greenhouse), a marketing feasibility study on what could be recruited, a list of potential recruits, and recommendations on how to approach the market with the opportunity.
- d. An **infrastructure plan**, including roads, pedestrian/bike facilities, utilities, stormwater, green infrastructure, to fit within the master land use plan and manufacturing strategy.
- e. A plan for **co-located commercial/retail development** (where do 1,000 workers eat lunch or get retail services?) and **workforce housing**. Such non-manufacturing uses may or may not belong on JO/Miller, or could potentially go on the 50 acres located between Old Route 9 and New Route 9, Tackley Mill, and/or the Blackford properties.
 - Ranson understands that the portion of land that is outside the JO/Miller Farm and that involves other lands, could be made to pay a proportional share for any grant match or other expenses, not from J.O.
- f. The specific development projects and parcels will need **zoning/code** updates.
- g. There must be **site plans** for each specific development. Under the Ranson Smart Code, generalized site plans can be approved that result in expedited pre-approvals and approvals for actual projects.
- h. **Renderings** of the eco-industrial park, **brochures and collateral material**, and/or a **web page** to feature the opportunity for manufacturing recruits.

It will be important for planning and collaboration to have a full and shared

understanding about which of these components above are required as part of the process, and which would be nice to have such as items that would be useful for marketing the property yet not essential. Put another way, if the cost for this Development & Manufacturing Master Plan is more than people can stomach, which components would you drop? MarkR, following up on our 6/5 conversation, the cost of the scope above is in the six figures, not the five figures.

4. Let's say (somewhat) hypothetically that the entire scope items (a)-(h) above can be obtained for \$250,000. The Economic Development Administration will pay for 50% of project costs (\$125,000), and require a 50% project match (\$125,000). Option A is that J.O. and Ranson split the cost of the \$125,000 match based on proportional allocation between J.O./Miller Farm and non-J.O. lands. Option B is that we seek to have EDA count some or all of the \$4.6 million that will be spent by the WV DOT on Rockwool Boulevard as part of "the project" including the Master Development & Manufacturing Plan, and count that \$4.6 million as non-federal match toward an EDA grant that pays the full amount of the \$250,000 Master Plan costs. I have real doubts about whether EDA will count Rockwool Blvd. as match, because (i) the WV DOT road money may be spent before the EDA grant is awarded – what is the schedule for that spending?; and/or (ii) the EDA may consider the Rockwool Road construction to be a distinct and separate project from a Master Planning project. Fortunately, the EDA representative for West Virginia Tracey Rowan, whom I know very well, is a creative problem-solver. I will ask her whether Option B can fly and, if so, obviously everybody would prefer that option. Otherwise, who is coughing up \$125,000?
5. There is a rolling deadline on EDA grants, so we do not have to meet any arbitrary deadline. But EDA money will run out on September 30, while they wait for Congress to appropriate FY2019 funding (delay, delay, breakdown, political elections, delay, breakdown, veto threats, president pouting, delay, delay, etc.). If we submit soon, we may get the funding approval by the end of summer and money in hand within 45 days or so after that. If not, we will get into the queue for funding that won't come until Thanksgiving or Christmas to EDA, with funding in Ranson's hands 45 days or so after that.

U.S. DOT BUILD Grant

1. Ranson has required and the parties have acknowledged that there cannot be manufacturing or other development at J.O. if there is only one means

of ingress/egress, for public safety reasons that are embodied in local code, fire marshal requirements, etc. If the lettuce greenhouse is built, that will require more road. And, obviously there cannot be manufacturing or commercial development on Miller Farm without a road. If there are creative solutions to that problem, Ranson needs to hear them and determine whether such options can be considered.

2. If Ranson joins with the WV DOT as a co-applicant and J.O., the County, the MPO and other allies as partners to apply for a U.S. DOT BUILD Planning Grant, the U.S. DOT could provide up to 100% of the costs of design/engineering/NEPA and other permitting/construction bid documentation and other pre-construction costs to get the roadway(s) “shovel-ready.” Of the \$1.5 billion in BUILD Grants available to DOT this 2018 year, only \$15 million is allocated to Planning grants. It is expected that grants will range from \$500k to \$1.5M, so about 15-20 nationally.
3. Yes MarkR, Ranson is a “rural” jurisdiction. The Trump DOT is highly favoring rural projects, and WV is Trump territory, which is all good for our chances. But I will repeat what DOT has often said about BUILD Grants, “the statistics show you have a better chance of getting into Harvard than getting a grant.” While the DOT webinar on June 6 might have stated that Rural applicants need not provide a match and that the statute does not require it, the statute has never required a rural match since the creation of the TIGER grants program. Early in 2017, I got a leaked copy of the DOT TIGER/BUILD grant guidelines before they were released, and DOT was going to require 80% matches; I organized a group of red-state and Republican mayors from across the country to protest this, and we successfully beat that 80% match requirement out of the grant requirements. But I will say, that a proponent that proposes 0% match is simply not going to go to Harvard barring a miracle. I highly recommend a match of 10%, and would strongly prefer a match of 25%. Let’s average that and make it about 18% for the sake of discussion on June 7, see below.
4. So, the real issue for discussion is, “how good a road would need to be built”, starting with the design/engineering of that road. The MPO has put a placcholder in its Long Range Transportation for a “Rockwood Extended” for \$4.7 million. Ranson’s on-call engineer Toole Design has extrapolated the costs of the Boulevard to be built with WV DOT funds for the current factory, and estimates the cost of \$13.35 million – agreed that this is a huge number. MarkR cited a ridiculously low cost for the

road.

So, the real go/no-go decision is whether J.O. can build the road totally on its own, without state or federal funding (and requirements), in a way that both meets local/state code and the needs of potential buyers/users/manufacturers, at a cost that is below the costs of the “full-blown” road that is subsidized by potential federal/state grants.

- If the full-blown road costs \$13.35 million, and engineering costs 11% of that, engineering costs are \$1,470,000. If we get 82% of that from BUILD funding with 18% paid for locally, the cost for design and engineering to J.O. is \$264,600.
- Can Gordon Associates or somebody else design the road for less than \$264,599, in a way that is fully compliant with code and future users’ needs?
- Of course, if you design a full-blown road with a BUILD grant, you will need to build a full-blown road (or value engineer to less cost). If you can get 82% of a \$13.35M road from a BUILD Construction grant, that means the road costs \$2,403,000 to the J.O.. Can the road be built without federal or state help, in a way compliant with requirements and future user needs, for less than that?
- It is my opinion that the design of a road with BUILD Act funding will help you get the road shovel ready, which in turn will help you attract real buyers/users, which in turn will enable you to approach the WV DOT and Development Office to say, “we’ve got fish on the line, we want to go for a BUILD Construction grant to build the infrastructure, will you help fund part of the 18% match . . . ??” And such a request will be much better positioned for political advocacy to the state for such subsidy, with the EDA manufacturing report and the BUILD engineering completed . . . than with a bare farmland property and no plans. But that calculation is really up to the private owners.
- The answer to these bullets determines whether J.O. ought to pay match to get into the BUILD funding pipeline or not.

Folks can disagree with the premises or conclusions here, but let’s get those on the table soon and decide what we want to do. BUILD Grants are tough to write and tough to win, and they are due July 19, so my firm’s team insists on a quick decision if we are going to be able to help with this.

Thanks, Matt Ward and Ashley Badesch

Matt Ward

CEO @ Sustainable Strategies DC

9/20/2017

To Whom It May Concern:

Our family owns Hazelfield Farm the property immediately to the east of the Jefferson Orchards property which has been incorporated into Ranson. Hazelfield is listed on the National register of Historic Places as well as documented by the Historic American Building Survey that is located in the Library of Congress.

We understand the importance to the community to have thoughtful, well-planned growth and we applaud the City of Ranson for their efforts to preserve a balanced environment where economic development is paired with the preservation of our truly exceptional and historic rural landscape. Our concerns are therefore related to preserving the peaceful and beautiful character of areas which remain agricultural, including ours.

Here are our major concerns, all of which can be addressed without creating a hardship:

1. Sound

- A. The Roxul plant will operate 24 hours a day and will presumably have trucks entering and leaving at all hours. The noise from these trucks will spread and amplify in the open landscape. We request that the Eastern edge of the Roxul property be stagger-planted with dense evergreens and, if possible, bermed to provide sound mitigation. This would benefit all of the neighbors to the east of the plant as well as the future residents of the proposed mixed-use community proposed for the eastern portion of the Orchards Property.
- B. The plant will presumably operate at the same noise levels as the Mississippi plant. We request that the City of Ranson and Roxul agree to limit sound transmission and if it is too loud (per agreed-upon limits) once the plant is built and operating, that Roxul will provide additional sound-abatement to cure excessive sound.

2. Lighting

- A. Due to the height of the structure (11 Stories) and the additional multiple chimney heights, lighting is our chief concern- not just for our sake but for the entire community. We understand that the Roxul Tower block will be enclosed, so it will not look like the over-lit cement plant in Martinsburg, but it has windows and presumably some exterior lighting on the building; in addition to the aircraft warning lights that are required. We request that the City of Ranson does all that can do to insist that the lighting be kept to a minimum as a part of their technical review and that Roxul does all that it can to minimize the impact of lighting on the adjacent community.

- C. The vast expanse of paving on the site will reflect a great deal of the light which falls on it at night if the lighting and paving are not properly designed. The result of this will be an intensely lit sky, especially on cloudy nights. We have all seen the effect that up-lighting clouds has on an area- it changes it from rural to urban. Shielding the source on pole-mounted lighting does not solve this problem, since it it's the intense down-light striking the pavement that causes the phenomenon. This can be avoided by specifying darker paving and minimizing light intensity. Again, we request that the City of Ranson and Roxul do everything that they can to avoid light-spillage; especially up-light.

3. Color

The main block of the Roxul Plant is approximate the size of an 11 Story building similar in mass to a typical K Street office building in Washington D.C. It will be visible for many miles; like the Martinsburg Cement Plant tower. We request that Roxul be asked to use a medium darkish tone ,subdued color for the mass of the building. The Mississippi plant is a light beige color and is highly visible. Medium to dark grey is generally successful; especially in a flat (not shiny) finish.

This is not meant to be an exhaustive list of all of the issues related to a successfully designed plant, just a request from concerned neighbors that a few often-overlooked issues be addressed properly for the benefit of all.

Respectfully Submitted,

The Adams Family



Sarah Adams <sarahadams85@gmail.com>

All WV SHPO letters re: ROXUL

3 messages






Sarah Adams <sarahadams@ftg.net>
To: William Adams <wadamswil@gmail.com>

Wed, Aug 29, 2018 at 5:03 PM

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V. Romanoff and Associates
<http://www.vromanoffandassociates.com>
Restoration and Design Consultants

5 attachments

-  **WV SHPO letter 04-03-17.pdf**
287K
-  **WV SHPO letter 08-18-17.pdf**
287K
-  **WV SHPO 07-19-17.pdf**
729K
-  **WV SHPO letter 10-03-17.pdf**
536K
-  **WV SHPO letter 06-27-18.pdf**
1333K

William Adams <wadamswil@gmail.com>
To: Sarah Adams <sarahadams@ftg.net>

Wed, Aug 29, 2018 at 5:53 PM

Sarah,

The July 19 and Aug 18, 2017 letters both say that SHPO understands that the project has a design change and will "involve several components that are over 100 feet in height". Did Roxul provide more detail on the actual height (twice as high)? and did it supply accurate info to the landmark commission? Note also in the Aug letter it says "we note that your office sent a letter about the proposed project to the [JCHLC] on June 5, 2017. As of July 25, 2017, no response has been received." Maybe you want to provide this detail to Mr. Burke?

Bill

[Quoted text hidden]

Sarah Adams <sarahadams@ftg.net>
To: William Adams <wadamswil@gmail.com>

Wed, Aug 29, 2018 at 7:03 PM

Yes-I too noticed the detail about the smokestacks.
I have asked Mr. Burke for more details.

[Quoted text hidden]



Sarah Adams <sarahadams85@gmail.com>

Section 106 review

Tom Mayes <TMayes@savingplaces.org>
To: Sarah Adams <sarahadams@flg.net>

Fri, Nov 9, 2018 at 7:36 AM

Hi Sarah - I've asked a few people in our office to look at this. I'll see if they have anything new to report - they weren't initially encouraging but let me see what I can find out.

Tom

Sent from my iPhone
[Quoted text hidden]

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)



Sarah Adams <sarahadams85@gmail.com>

(no subject)

1 message

Sarah Adams <sarahadams@ftg.net>
 To: John Eddins <jeddins@achp.gov>

Fri, Oct 26, 2018 at 8:02 AM

This is the email I sent to you on Oct. 4th. As my father has noted -it is National Register of Historic **PLACES-so the context does matter.**

Good morning! I really appreciate all of the work you have done on our behalf. I am sure you can appreciate the frustration we are feeling re: the NR logic that if a property is specifically recognized for its architectural importance that then the "context" or setting is not relevant!

"The effects from an undertaking on an historic structure depend on what the structure was found eligible for.

If it's eligible under Criterion C, and the focus is on it exemplifying a type of architecture, the setting may not be a major factor.

If the property was found eligible as an example of a farmstead, and the nomination includes reference to its setting and context, then that may contribute to its eligibility.

An adverse effect involves an alteration in the characteristics of a property that contribute to its eligibility for inclusion on the national register in a way that diminishes those characteristics.

Often a federal agency will consider vegetative buffers as a means of limited indirect adverse effects. Not sure if that was a factor here. Hopefully, the Corps response will help clarify."

This property was listed on the National Register in 1975 and I doubt that any of us understood that the having it recognized for its architectural significance would limit its protection for the setting- which is very close its original acreage.

Is there any way, at this point, to remedy this?

Anyway any thoughts would be appreciated and I am wondering if you have any sense as to when you might hear something from the Army Corps of Engineers?

I have copied my father and primary owner of Hazelfield, William Howard Adams, on this email.

Best, Sarah Adams

I am still waiting to hear from you re: the ACoE permit. Please respond to my email.

Thanks.

Sarah

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

8/27/2018

Gmail - Drawing showing Hazelfield Viewshed



Sarah Adams <sarahadams85@gmail.com>

Drawing showing Hazelfield Viewshed

8 messages

Sarah Adams <sarahadams@fltg.net>
 To: "Blevins, Ernest E" <Ernest.E.Blevins@wv.gov>

Mon, Oct 23, 2017 at 2:06 PM

Mr Blevins,
 Attached is a document showing the viewshed from Hazelfield. This was prepared by a licensed architect.. Please share with the consultant.
 Thank you.
 Sarah

 ROXUL drawing showing site lines from Hazelfield.pdf
 619K

Blevins, Ernest E <Ernest.E.Blevins@wv.gov>
 To: Sarah Adams <sarahadams@fltg.net>

Wed, Oct 25, 2017 at 9:51 AM

I was out of the office Monday and Tuesday. This is great and I do need to return a call to the consultant. I will forward it on to them. Thank you very much, this will be very useful.

Ernest Everett Blevins, MFA
 Structural Historian for Review & Compliance
 West Virginia Division of Culture & History
 West Virginia State Historic Preservation Office
 1900 Kanawha Boulevard East
 Charleston, West Virginia 25305
 304-558-0240, ext. 726
 ernest.e.blevins@wv.gov

From: sarahadams85@gmail.com [mailto:sarahadams85@gmail.com] On Behalf Of Sarah Adams
 Sent: Monday, October 23, 2017 2:06 PM
 To: Blevins, Ernest E <Ernest.E.Blevins@wv.gov>
 Subject: Drawing showing Hazelfield Viewshed

[Quoted text hidden]

8/27/2018

Gmail - Drawing showing Hazelfield Viewshed

Sarah Adams <sarahadams@fltg.net> Thu, Oct 26, 2017 at 1:28 PM
 To: Walter Chatham <walter@wfchatham.com>
 Cc: mary chatham <madamschat2@gmail.com>, William Adams <wadamswil@gmail.com>, William H Adams <whadams@frontiernet.net>

Walter,

As you can see I forwarded on your drawing that illustrates Viewshed. I am wondering if you think it would be useful to show the "Winter" version, ie no leaves?
 Thanks for all of your help

S

----- Forwarded message -----

From: Sarah Adams <sarahadams@fltg.net>
 Date: Mon, Oct 23, 2017 at 2:06 PM
 Subject: Drawing showing Hazelfield Viewshed
 To: "Blevins, Ernest E" <Ernest.E.Blevins@wv.gov>

[Quoted text hidden]

--
 V. Romanoff and Associates
<http://www.vromanoffandassociates.com>
 Restoration and Design Consultants

 ROXUL drawing showing site lines from Hazelfield.pdf
 619K

William H Adams <whadams@frontiernet.net> Thu, Oct 26, 2017 at 7:28 PM
 To: Sarah Adams <sarahadams@fltg.net>

Sarah, I cant tell you how proud and impressed by your strategy
 The sound from the new rt. 9 has increased significantly here in the last two weeks beginning Oct. 1.

Sent from my iPad

RESIST
 OPPOSE

[Quoted text hidden]

<ROXUL drawing showing site lines from Hazelfield.pdf>

William Adams <wadamswil@gmail.com> Thu, Oct 26, 2017 at 7:30 PM
 To: Sarah Adams <sarahadams@fltg.net>, Walter Chatham <walter@wfchatham.com>
 Cc: William H Adams <whadams@frontiernet.net>, mary chatham <madamschat2@gmail.com>

I can't quite see it on my phone, but is that the corrected drawing showing the right distance?

Bill

[Quoted text hidden]

Sarah Adams <sarahadams@fltg.net> Sat, Oct 28, 2017 at 9:35 AM
 To: William H Adams <whadams@frontiernet.net>

I want to send the 2nd floor height from grade, to illustrate what will be seen from 2nd story.
 Can you send me the measurement from grade to first floor height and floor-ceiling height of 1st story.
 In other words the height of the 2nd floor-it can be an approx.

8/27/2018

Gmail - Drawing showing Hazelfield Viewshed

[Quoted text hidden]

Sarah Adams <sarahadams@fltg.net>
To: William H Adams <whadams@frontiernet.net>

Sun, Oct 29, 2017 at 2:41 PM

Did you see this- I am thinking that the basement extends approx. 4' above grade- then the 1st floor ceiling height is 12'
Is that about right or is it taller?

----- Forwarded message -----

From: Sarah Adams <sarahadams@fltg.net>

[Quoted text hidden]

[Quoted text hidden]

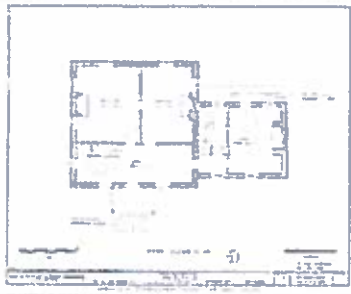
Sarah Adams <sarahadams@fltg.net>
To: William H Adams <whadams@frontiernet.net>

Sun, Oct 29, 2017 at 3:16 PM

Here are the HABS drawings- no 2nd floor?

[Quoted text hidden]

3 attachments



Hazelfield HABS 1st floor plan.jpg
42K

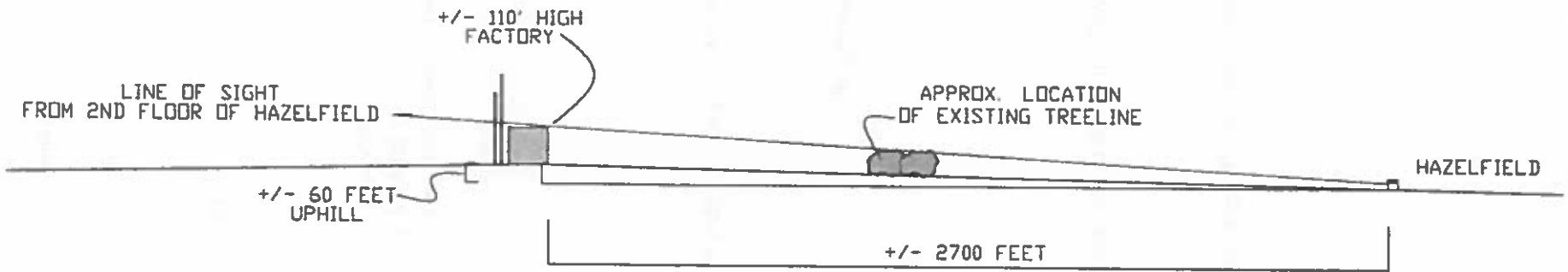


Hazelfield HABS basemnt plan.jpg
47K



Hazelfield HABS front elevation.jpg
39K

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)





Sarah Adams <sarahadams85@gmail.com>

FR# 17-437-JF Granny Smith Lane, Kerneysville

15 messages

Blevins, Ernest E <Ernest.E.Blevins@wv.gov>
To: "sarahadams85@gmail.com" <sarahadams85@gmail.com>

Wed, Oct 18, 2017 at 1:57 PM

Following up on my phone message.

We have this listed as a Army Corps permit project and therefore in response to your question about 106 the project is under review. I understand there is a meeting tonight about this project. To expedite getting you the information you wish please send a response email to me with language similar to this (or cut and paste this):

Re: Freedom of Information Act Request

Dear Ms. Pierce:

This is a request under the Freedom of Information Act. I hereby request copies of the following records:

Response letters for FR# 17-437-JF Granny Smith Lane, Kenesyville.

Thank you

(name, address and phone number)

This will put a written record in our file of the request and I will send out the scanned letters we have upon receipt of the request.

Thank you. If you have any questions my contact information is below. These are scanned and there is no charge for the copies in this request.

Ernest Everett Blevins, MFA

Structural Historian for Review & Compliance

West Virginia Division of Culture & History

West Virginia State Historic Preservation Office

8/27/2018

Gmail - FR# 17-437-JF Granny Smith Lane, Kerneysville

1900 Kanawha Boulevard East
Charleston, West Virginia 25305
304-558-0240, ext. 726
ernest.e.blevins@wv.gov

Sarah Adams <sarahadams85@gmail.com>
To: "Blevins, Ernest E" <Ernest.E.Blevins@wv.gov>

Wed, Oct 18, 2017 at 2:07 PM

Re: Freedom of Information Act Request

Dear Ms. Pierce:

This is a request under the Freedom of Information Act. I hereby request copies of the following records:

Response letters for FR# 17-437-JF Granny Smith Lane, Kenesysville.

Thank you!

Sarah Adams
4 Falls St.
Trumansburgg, NY 14886
607-379-1590

WH Adams
Hazelfield Farm
1633 Warm Springs Road
Shenandoah Jct., WV 25442

This will put a written record in our file of the request and I will send out the scanned letters we have upon receipt of the request.

Thank you. If you have any questions my contact information is below. These are scanned and there is no charge for the copies in this request.

[Quoted text hidden]

8/27/2018

Gmail - FR# 17-437-JF Granny Smith Lane, Kerneysville

[Quoted text hidden]

William H Adams <whadams@frontiernet.net>
 To: Sarah Adams <sarahadams85@gmail.com>

Fri, Oct 20, 2017 at 1:03 PM

It seems to me that you got the door open on the historic preservation issue.

Sent from my iPhone

RESIST

OPPOSE

[Quoted text hidden]

Walter Chatham <waller@wfchatham.com>
 To: Sarah Adams <sarahadams85@gmail.com>
 Cc: William Adams <wadamswil@gmail.com>, William H Adams <whadams@frontiernet.net>, mary chatham <madamschat2@gmail.com>

Sat, Oct 21, 2017 at 10:21 AM

Well done! This is super important moving forward and its hard to believe that the "consultants" failed to notice; but that why its important to do what you did!

xoxo

W

Walter Chatham, Architect

FAIA, AICP, LEED AP

T 212.925.2202

F 212.966.2857

E waller@wfchatham.com

www.wfchatham.com

On Oct 20, 2017, at 12:18 PM, Sarah Adams <sarahadams85@gmail.com> wrote:

[Quoted text hidden]

Sarah Adams <sarahadams85@gmail.com>
 To: Martin Burke <martinburke@frontiernet.net>

Tue, Nov 7, 2017 at 7:18 AM

Here is my correspondence with Ernest Blevins @ the State Historic Preservation Office re106 review.

----- Forwarded message -----

From: **Blevins, Ernest E** <Ernest.E.Blevins@wv.gov>

[Quoted text hidden]

--

V. Romanoff and Associates
<http://www.vromanoffandassociates.com>
 Restoration and Design Consultants

Attachment: 20200623 - Written Comments - Packet #9 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: James Hemme <James.Hemme@erm.com>
Sent: Thursday, June 18, 2020 2:36 PM
To: Stacey Pfaltzgraff
Subject: Emailing - RAN-5 Comment for Zoning JAH 06-18 2020.pdf
Attachments: RAN-5 Comment for Zoning JAH 06-18 2020.pdf

CAUTION: External Email

Please find attached my written comments for the Rockwool Zoning hearing.

Sincerely,

James Hemme
Consultant Director
Environmental Resources Management, Inc.

This electronic mail message may contain information which is (a) LEGALLY PRIVILEGED, PROPRIETARY IN NATURE, OR OTHERWISE PROTECTED BY LAW FROM DISCLOSURE, and (b) intended only for the use of the Addressee (s) names herein. If you are not the Addressee(s), or the person responsible for delivering this to the Addressee (s), you are hereby notified that reading, copying, or distributing this message is prohibited. If you have received this electronic mail message in error, please contact us immediately at (617) 646-7800 and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: <http://www.erm.com>. To find out how ERM manages personal data, please review our [Privacy Policy](#)

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

ERM

18 June 2020

Page 1

18 June 2020

Submitted Via: spfaltzgraff@ransonwv.us.

Ranson City Council
 312 S. Mildred St.
 Ranson, WV 25438

Subject: Comments on Proposed Ordinance #2017-302

Dear Ranson City Council:

Please accept these comments on Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)".

The Rockwool RAN5 facility is designed to be protective of the environment and karst conditions with design elements meeting or exceeding those required by regulatory permitting. The facility considers the local geology in all decision making related to features that would potentially have the ability to affect surface water and ground water quality.

Industrial development routinely occurs within karst regions and is performed safely under these circumstances through the employment of established and accepted management practices and operational procedures. One only has to look along the Interstate 81 corridor to the west of the Rockwool facility to see recent and numerous industrial developments successfully located within the same geologic formations as Rockwool.

Rockwool has employed geotechnical and geologic experts and practitioners in exploring, identifying and accounting for the karst region. Geotechnical considerations and design techniques for structures and ancillary facilities are incorporated into the design to be protective of the subsurface geology and provide for the stability and longevity of the facility structures.

Examples of how the facility is being proactive in accounting for the karst environment and surface water/groundwater include:

- **Rainwater Reuse Pond** –Rainwater collected from rooftops and paved areas on the northern end of the facility where raw materials and initial manufacturing of the products occur will be directed to the facility's rainwater reuse pond. This collection of runoff assists in providing peak flow runoff management for the facility keeping post development storm water discharge rates at the same or a reduced level from pre-development conditions. Further and even more importantly, this pond provides a reservoir of water suitable for use as cooling water and is ultimately evaporated. The pond is designed to efficiently collect storm water runoff for reuse and ultimate evaporation and minimize use of local potable water supplies.
- **Storm Water Management Pond** – Rockwool currently uses this pond as a sedimentation pond and will convert it into a storm water management pond to manage post development flows to be equal to or less than pre-development storm water runoff conditions. The storm

water management pond will handle the southern end of the facility and parking areas where no feedstock materials are stored or furnace operations occur.

- **Pond Liner Systems** - Best management practices for karst areas within the Chesapeake Bay watershed recommends that a single 60 mil geomembrane liner be used to prevent infiltration from storm water related ponds. For the RAN5 facility runoff collected in both the Rainwater Reuse Pond and Storm water Management Pond will be stored or managed within a much more robust liner system. These ponds have both been lined with a geo-synthetic lining system consisting of:

- high strength subgrade stabilizing geotextile;
- geo-synthetic clay liner (GCL) consisting of a layer of very low permeability bentonite clay encapsulated by two geotextiles;
- 60 mil high density polyethylene (HDPE) geomembrane

This creates a composite liner system approach to water retention in the ponds which is more protective of the environment and the underlying karst geology than requirements outlined in the Chesapeake Bay guidance document.

- **Tanks** – The facility will utilize no underground storage tanks. Above ground storage tanks (AST's) for the storage of liquids will be installed in accordance with the West Virginia Above Ground Storage Tank rule including either double walled technology or regulatory secondary containment system. AST's in secondary containment containing manufacturing components will also be covered with a roof structure to minimize rainwater accumulation and promote good housekeeping.
- **Groundwater Monitoring Well Network**- Rockwool has voluntarily offered as part of their operating Multi-Sector storm water permit to install a groundwater monitoring network, consisting of three down-gradient monitoring wells and one up-gradient monitoring well at the RAN5 facility. Rockwool has offered this despite no regulatory driver requiring this facility to have a groundwater monitoring well network.

In summary, Rockwool has met or exceeded regulatory requirements as described above to be protective of human health and the environment.

Sincerely,



James Hemme PE, LRS, MBA
Environmental Resources Management, Inc.
Consultant Director

Stacey Pfaltzgraff

From: Donald Henry <donhenry42@gmail.com>
Sent: Thursday, June 18, 2020 2:00 PM
To: Stacey Pfaltzgraff
Subject: Comment on Ordinance 2017-302

CAUTION: External Email

Below are comments made by the the Eastern Panhandle Sierra Club on Ordinance 2017-302. I am in full agreement with that group's concerns and urge the council to vote against this ordinance.

Donald L. Henry
 320 Old Martinsburg Road
 Shepherdstown, WV 25443

 We are extremely concerned about the errors made by the City of Ranson in 2017 when reallocating transect districts established in 2012, thereby diminishing the civic zones and civic buildings from 21 ½ acres to 14 acres. This action showed no regard for citizen and environmental needs in the City of Ranson and neighboring communities. The re-zoning effort left the door open for hazardous heavy industry to replace the previously approved multi-use land development of this site, which included a Marc Train station, housing and business development. The former planned development, known as The Comprehensive Plan, would have benefited the City of Ranson and Jefferson County as a whole. Allowing Rockwool to come in is disastrous.

Important and significant decisions were made by Ranson without public participation in 2017 which disregarded proper procedure and violated the law. The Eastern Panhandle Sierra Club joins many others in urging you to vote against this ordinance which puts the needs of Rockwool above those of the citizens that you represent. You have a chance to redeem your Council and we strongly encourage you to take it.

Heavy industry is not wanted in Ranson or anywhere else in Jefferson County because it will adversely affect local businesses such as agriculture, equine and tourism. It will be harmful to the lives of those attending nearby schools and deteriorate air, land and water quality. It does not align itself with the Comprehensive Plan and it is an example of environmental discrimination. The plan was produced with the help of a federal grant and it was basically a promise to Jefferson County citizens. Citizens were counting on this desirable development only to have this plan ditched without any real input.

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

To: Ranson City Council/Stacy A. Dodson Pfaltzgraff, City Clerk/Human Resources Manager

Re: Ranson City Ordinance #2017-302

I am urging the Ranson City Council to correct its actions of 2017 (Ordinance #2017-302) and to revoke Rockwool's building permit.

I am deeply concerned about the errors made by the City Council in 2017 by re-allocating transect districts established in 2012. This action showed no regard for citizen needs and environmental concerns in the City of Ranson and neighboring communities. The re-zoning left the door open for hazardous heavy industry to replace the previously approved multi-use land development of this site. That former plan, known as The Comprehensive Plan, would have benefited the City of Ranson and Jefferson County as a whole. Allowing heavy industry like Rockwool to come in will be highly damaging in many ways.

These important decisions were made by Ranson City Council without public participation in 2017, which disregarded proper procedure and violated the law. Jefferson County citizens have sought the opportunity to provide input on a project that was brought to our area in secret, gives away our scarce local property tax receipts, negatively impacts our local economy and, most importantly, will harm the health of our local citizenry with an outsized effect on our vulnerable school children in nearby schools.

Heavy industry is not wanted in Ranson or anywhere else in Jefferson County because it will adversely affect local businesses such as agriculture, equine business, and tourism. It will deteriorate air, land, and water quality. It does not align with the Comprehensive Plan that was produced with the help of a federal grant and that was basically a promise to Jefferson County citizens. This desirable development plan was abandoned without any public input.

I urge you to vote against this ordinance, which benefits Rockwool but harms the citizens that you represent. I urge you to take this opportunity to redeem your Council.

Sincerely,
Kathryn R. Henry

320 Old Martinsburg Rd.
Shepherdstown, WV 25443

Melissa Hynes
33 Holly Springs
Charles Town, WV 25414

June 18, 2020

Dear Mayor & Council,

I am writing to oppose Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

The Ranson Comprehensive Plan says the following in reference Transect Districts:

2.3.4 THE TRANSECT Current zoning codes segregate uses, prohibiting the creation of complete neighborhoods. The SmartCode, a transect-based, form-based code, is a tool that guides the form of redevelopment, infill, or greenfield development into complete neighborhoods at the hamlet, village, or town scale. The zones within the SmartCode are designed to create complete human habitats ranging from the very rural to the very urban. Whereas conventional zoning categories are based on different land uses, SmartCode zoning categories are based on whether their character is urban or rural, or somewhere in-between. All Transect zones allow some mix of uses, enabling complete neighborhoods. The Transect ensures that a community offers a full diversity of building types, thoroughfare types, and civic space types, and that each has appropriate characteristics for its location.

The Ranson Comprehensive Plan supports the use of the Transect District. This zoning map amendment is deleting one of "villages" that was approved in 2012 for Jefferson Orchards and reallocating the acres (rezoning) to Special District Industrial. The 2012 rezoning allocated about 98 acres for Special District Industrial and the proposed rezoning will allocate about 100 acres more land for Special District Industrial.

It may surprise you to know that Shepherdstown is the same size as Jefferson Orchards (give or take). So when you look at the map of Jefferson Orchards – imagine over half of Shepherdstown set aside for Special District Industrial. This loss of housing is an enormous loss and an attack against the future of Jefferson County. The relocation of the MARC Train Station has been based on the creation of a Transit Oriented District built around 4,431 dwelling units mixed in with a variety of businesses that would make Jefferson Orchards a wonderful place to live, work and play. The Ranson Comprehensive Plan clearly calls out in multiple sections of the Comprehensive Plan the desire to increase affordable housing.

These 100 acres that you are considering to rezone to Special District Industrial will in fact be stolen from a well-thought Land Development Plan that featured two villages. The loss of the 100 acres means the following:

- 1) The maximum density in 2012 was for 4,431 dwelling units and the maximum density that is proposed with this zoning map amendment is for 2,517 dwellings units. This rezoning means almost 2,000 less dwelling units (the equivalent loss of housing for about 4,000 residents).
- 2) The 2012 Land Development Plan showed 14 Civic Zones and 2 Civic Buildings. The proposed rezoning would reduce this down to 9 Civic Zones and 1 Civic Building
- 3) The 2012 Land Development Plan showed 50 acres of Natural Zone. The proposed rezoning would reduce this down to 38 acres of Natural Zone

The Ranson Council has before them a zoning map amendment that is taking a 350 acre "town" with 2 villages and turning over half into Special District Industrial. This zoning map amendment is not in compliance with the Ranson Comprehensive Plan. The following are just a few sections of the Ranson Comprehensive Plan that support the need for housing, parks, civic spaces, and high density neighborhoods in walking distance of a transit stop.

1. OVERLL - Not in compliance with Illustrative Plan (B.1.6) or the Regulating Plan for Jefferson Orchards shown in Appendix B
2. Page 27 - Provide a diversity of neighborhood types that are fiscally sustainable and support the overall prosperity of the City. Neighborhoods' density, infrastructure, and methods for mitigating environmental impact (such as stormwater runoff) should be coordinated with each other. High density can justify investments in infrastructure that are not cost-effective at lower densities.
3. Page 13 - "Affordable living includes housing, transportation, energy, recreation, and shopping – True community affordability depends upon leveraging value across the full array of housing, transportation, energy, recreation, and retail sectors. Infrastructure investments and development policies should employ strategies that balance affordable options for a variety of family sizes, incomes and life cycle stages"
4. Page 14 – "Neighborhoods are the building blocks – Walkable, mixed-use neighborhoods are the fundamental building blocks of communities. Most people should be able to walk to at least some of their daily needs in safe, appealing environments"
5. Page 14 – "Each neighborhood has a balanced mix of activities to meet the needs of all its residents: shopping, work, education, recreation, and various types of housing. Many daily needs should be met within each neighborhood, and each neighborhood should have its fair share of jobs, recreation, and schools. Moreover, a variety of housing types – rental and for-purchase – should be available in each neighborhood"
6. Page 14 – "Each neighborhood should be sized to its purpose. The size of each neighborhood should be determined by the drawing power of its center. The more compelling the center, the larger its Pedestrian Shed should be"
7. Page 14 – "Encourage and promote affordable low-cost housing. The City can not grow without providing for the needs of all of its residents and business owners, so low-cost housing should be available generally, and especially near employers"

8. Page 14 – “Appropriate building densities and land uses should be within walking distance of transit stops. In order for public transit to become a viable alternative to the automobile for every daily need, the areas around transit lines should be developed to a greater intensity. Those areas should also have higher priority for development.”
9. Page 38 – “Affordable housing is critical to the City, both in meeting the needs of current residents and in attracting new residents. As mentioned in 3.1 Land Use, a key strategy in providing affordability is permitting smaller lot sizes as well as smaller units.”
10. Page 39 – “When selecting sites for affordable housing, consider proximity to workplaces. For many people, transportation is second only to housing in cost. Public transportation and sheer proximity to work, shopping, and amenities can reduce transportation costs – and make the combination of transportation and housing more affordable.”
11. Page 46 – “Provide a variety of types and sizes of parks. Sizes should range from small neighborhood playgrounds within easy reach of each dwelling to large parks, such as Flowing Springs Park. Very large parks should be located outside of the centers of neighborhoods, and playgrounds can be located on ordinary city blocks. Wherever possible, the parks should be lined by thoroughfares, rather than buried behind backyards. Smaller parks and squares should be physically defined by buildings and landscaping, not treated as residual space.”
12. Page 50 – “1. Neighborhoods in Ranson should have access to adequate community center facilities. Not only are such facilities beneficial to residents, but many employers look for good recreational facilities... Every neighborhood, or collection of neighborhoods, should have some community facilities for community use. Many subdivisions build their own facilities as private amenities, but the City can provide its own facilities to neighborhoods’ residents.”

Please take these examples of non-compliance into consideration and do not approve Ordinance #2017-302 to save the future of Jefferson County. Please do not take away this valuable the land from Jefferson Orchards that was set aside for a vibrant transit oriented district with affordable homes where people could live, work and play.

Thank you,

Melissa Hynes

Stacey Pfaltzgraff

From: Denise Nick <desirecompassion@yahoo.com>
Sent: Thursday, June 18, 2020 4:52 PM
To: Stacey Pfaltzgraff
Subject: Proposed Ordinance

CAUTION: External Email

Dear Ranson City Council,

I am writing to encourage the City of Ranson's City Council to adopt the Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)". It is time to move past the false narrative being pushed by destructive environmental radicals who seek to destroy Ranson's progress. The City Council previously made the decision to rezone the property in question and hundreds of millions of dollars have been spent by private and public entities based upon Ranson's governmental act. Failure to adopt the Ordinance will subject Ranson to years of costly and needless litigation (that it will lose), which will force Ranson to cut public services to Ranson's citizens.

Sincerely,
D. Virginia Jackson

[Sent from Yahoo Mail on Android](#)

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Stephanie Reel <sreel@juewater.net>
Sent: Thursday, June 18, 2020 4:28 PM
To: Stacey Pfaltzgraff
Subject: Written Comment for June 23rd Public Hearing
Attachments: JUI letter.pdf

Importance: High

CAUTION: External Email

Please see attached my written comment on behalf of Jefferson Utilities to be read at the Public hearing on June 23rd.

Thank you,

Stephanie L. Reel
General Manager
Jefferson Utilities, Inc.
270 Industrial Boulevard
Kearneysville, WV 25430
304-728-2077 ext. 207
301-302-9702 (c)
304-728-8494 (f)
www.juiwater.net

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Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Jefferson Utilities, Inc.

June 23, 2020

Re: Ordinance #2017-302

Rezoning of "Jefferson Orchard" -Reallocating Transect Districts (District 8 , Tax Map 12, Parcel 1)

Dear Members of the Ranson City Council:

I am writing this to represent Jefferson Utilities' interest as the water provider for the Jefferson Orchard property and the current industrial zoning that is now under review. This property is served with the fully completed 16" water line along Charles Town Road. This extension was fundamental for the continued growth of the western end of Jefferson County which includes serving the Jefferson Orchard and surrounding properties. This hearing is to determine if the industrial zoning classification is still warranted. As one of the utility providers in the area, maintaining the classification of industrial zoning for this property would be substationally beneficial to our existing customer base.

The cost of producing potable water continues to increase every year, no matter the utilities' efficiency, due to global inflation. The measure to decrease cost is through the expansion of our water system and customer base scale.

The Jefferson Orchard Property is the best location in the western end of Jefferson County with the existing infrastructure to accommodate large scale industrial development and utility users. Large industrial users need large building lots to accommodate their production purposes. Utility infrastructure is now in place for all types of industrial growth and the Jefferson Orchard Property can accommodate the need for large lot structure. The additional industrial water demand would allow Jefferson Utilities to maintain the current rate structure that we have been able to sustain for the last 10 years and into the foreseeable future.

The financial arrangement reached by Jefferson Utilities and Rockwool in extending water service to the plant provides a truly remarkable benefit to all of the 3600 customers served by Jefferson Utilities. This is not the time to reverse a decision that have resulted in such wide ranging benefit to the dependability and economy of water service throughout our system.

We believe that changing the zoning would be a failed use of this property and the potential loss of economic growth for Jefferson County as a whole. Please consider the impact that would occur by the reversal of a decision that was to benefit this county. Although not everyone agrees with the invitation of the Rockwool facility to Jefferson County, the benefits of its existences here far outweighs the cons.

Respectfully,



Stephanie Reel, General Manager

270 Industrial Boulevard • Kearneysville, WV 25430 • (304) 728-2077 • Fax: (304) 728-7326

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Stacy <sevanisko@hotmail.com>
Sent: Thursday, June 18, 2020 5:00 PM
To: Stacey Pfaltzgraff
Subject: Public Hearing Ordinance #2017-302 submission #1
Attachments: JCV Ordinance #2017-302 Enclosures 1.pdf; JCV Ranson Rezoning 06-18-20.pdf

CAUTION: External Email

Stacey

I'm resending from another account for added precaution.

Attached please find the public comments submission for Jefferson County Vision, Inc. These files are to be applied to our comments against Ordinance #2017-302 that is scheduled for a 2nd reading and public hearing on 06/23/20.

Can you please send confirmation of receipt. Due to size, I will need to send 5 FIVE separate attachments. I including the Cover Letter again, just in case.

Thank you for your attention to this matter,
 Sincerely, On behalf of the the Board of Directors,

Anastasya Tabb
 President
 Jefferson County Vision, Inc.

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)



June 18, 2020

Ranson City Council
312 S. Mildred Street
Ranson, WV 25438

Re: PROPOSED ORDINANCE #2017-302

To the Ranson City Council:

This letter is written regarding proposed Ordinance #2017-302 that, if passed, would permit unintended heavy industrial uses at the Jefferson Orchards parcel. For the reasons set forth herein, this Ordinance would violate the City Code and the Comprehensive Plan.

First, Ordinance #2017-302 violates the Ranson City Code that prohibits both contract and spot zoning. Pursuant to Section 19-19 of the Ranson City Code (2018):

Amendments.

- (a) Principles. Amendments of the text and zoning map of this chapter may be undertaken from time to time in order to carry out the purposes stated in section 19-1¹, and to improve this chapter's ability to effectively carry out these purposes. Proposed amendments should be considered with significant attention to the issues of whether they promote health, safety, and the general welfare and encourage the most appropriate use of land.
- (b) Limitations. Zoning classifications shall not be established nor the official zoning map amended in the following manners:
 - (1) Conditional zoning. Zoning classifications shall not be based on conditions of times and/or development which will result in an automatic classification change at a future date.
 - (2) Contract zoning. Zoning classifications shall not be based on assurances by an applicant, or conditions imposed by the city council that rezoned property will be developed in a particular, limited fashion.
 - (3) Spot zoning. Zoning classifications shall not be adopted in a manner which confers special benefit or places special consideration upon a particular parcel of land, nor adopted in a

¹ Section 19-1. Authority; purpose, enactment. (b) Purposes. It is the intent of this chapter to encourage well-planned growth for the city and its environs; to help insure wise, productive, and harmonious uses of land; to guide the use of land in a manner which gives appropriate consideration to the economic, social, cultural, aesthetic, and environmental values of the citizens of the community; and to preserve and enhance the quality of life for community residents. Ranson City Code (2018).

manner which classifies a relatively small area differently from surrounding property of similar nature and logical use, without sound basis in the purposes of zoning as set forth in this chapter and state law.

Regarding improper contract zoning, "zoning classifications shall not be based on assurances by an applicant, or conditions imposed by the city council that rezoned property will be developed in a particular, limited fashion." Indeed, as related to Rockwool, there is evidence, by agreements and otherwise, that Ranson and other local government agencies provided advanced assurances to Rockwool and the property owners that the parcel would be rezoned to permit the intended industrial use. Rockwool, therefore, had the expectation that the subject parcel would be rezoned particularly for its use. This is textbook improper contract zoning.

Regarding improper spot zoning, "zoning classifications shall not be adopted in a manner which confers special benefit or places special consideration upon a particular parcel of land, nor adopted in a manner which classifies a relatively small area differently from surrounding property of similar nature and logical use, without sound basis in the purposes of zoning as set forth in this chapter and state law." Indeed, as related to Rockwool, there is clear evidence that the subject parcel was rezoned for that intended industrial use. The passage of Ordinance #2017-301, simultaneous with the failed initial attempt to pass Ordinance #2017-302, indicates that the subject parcel was, and is, being rezoned specifically for Rockwool. Among other use changes in a Special District, Ordinance #2017-301 permits stacks - the most significant change - and clearly confers a special benefit for Rockwool and other industrial users in an area of the City devoid of such similar uses.

More importantly, Ordinance #2017-302, and the resulting zoning classification change permitting heavy industrial use, clearly violates the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson. Specifically, the 2012 Ranson Comprehensive Plan provides as follows:

- A. Ranson wants to ensure that future development in this central area of Jefferson County is traditional-neighborhood, mixed-use, and green-focused development. (Comp Plan 2012, Pg. 12);
- B. A central goal of this Comprehensive Plan is to restore and reinforce a neighborhood-based town structure to Ranson...Complete neighborhoods require a mixed of land uses and a mix of housing types and prices arranged to provide a variety of living and working options within walking distance of each other. The Pedestrian Shed circle indicates the maximum area within which a pedestrian could walk to the center within approximately 5 minutes, depending on the street network's connectivity. (Comp Plan 2012, Pg. 14);
- C. Neighborhoods depend on having a consistently good pedestrian experience. Walkable streets are visually stimulating, while environments that are hostile or uninteresting immediately turn pedestrians away...The circular pedestrian shed provides an approximate guide for the location of a neighborhood. (Comp Plan 2012, Pg. 14-16);
- D. Pedestrian Shed and Neighborhood Areas have been designated as such on the Jefferson Orchards / Rockwool site. (Comp Plan 2012, Pg. 17);

- E. Conservation of wilderness and agriculture should be prioritized in more rural parts of the region, while development intensities should be highest in the more urban parts of the region. (Comp Plan 2012, Pg. 18);
- F. The Jefferson Orchards / Rockwool site is designated as a rural part of Ranson. (Comp Plan 2012, Pg. 19);
- G. Today, the vision for the land in the Urban Growth Boundary is multiple neighborhoods using distinctive names to create their own identity and preserve the small town atmosphere. Each of these neighborhoods should have its own commercial center to support their local needs and reduce trip generation. This plan also encourages the islands within the Urban Growth Boundary to annex into the City. This will complete the neighborhoods and help unify Ranson's residential and business communities. (Comp Plan 2012, Pg. 27);
- H. The Jefferson Orchards / Rockwool site is designated within the Urban Growth Boundary. (Comp Plan 2012, Pg. 21);
- I. New development contiguous to urban boundaries should be merged with the existing mosaic of neighborhoods. Non-contiguous development should be organized into village-like or hamlet-like neighborhoods with their own center, edges, and plans for a job/housing balance. (Comp Plan 2012, Pg. 30-31);
- J. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp Plan 2012, Pg. 31);
- K. The City should prioritize infill development over outward expansion. It should also prioritize the annexation of land surrounded (or nearly so) by the city over the annexation of contiguous land over the annexation of tenuously connected land. Finally, the annexation of land should be justified according to the intensity and type of development, physical impact, and effect upon City services. (Comp Plan 2012, Pg. 32);
- L. Develop and redevelop land through well-coordinated types of neighborhoods, districts, and corridors. If there are well-understood types of neighborhoods, districts, and corridors, then it is easier to reach consensus and coordinate development and redevelopment. (Comp Plan 2012, Pg. 32-33);
- M. Engage the whole community in planning constructively. While the needs of particular stakeholders and neighboring property owners must be considered, projects should be planned with the wider community in mind. (Comp Plan 2012, Pg. 33);
- N. Industrial uses have been designated only in the Urban Growth Suburban Sector, S3. Exhibit C, (Comp Plan 2012, Pg. 21);
- O. Hamlet development patterns are anticipated along the perimeter or edges of the neighborhoods in the Urban Growth Boundary and as solitary clusters within the rural landscape. Although the vast majority of the land within the UGB is vacant or in large-scale agricultural use, this plan anticipates that this use will strategically be

augmented with complete neighborhoods that complement and support the agricultural production lands. The more rural areas of the county will serve the large-scale agricultural community. (Comp Plan 2012, Pg. 35);

- P. Protect and enhance the agrarian heritage of land in the Urban Growth Boundary. Such protection is not limited to the physical protection of land, but includes the retention and development of working farms. (Comp Plan 2012, Pg. 36);
- Q. Consolidate development on rural land to preserve agricultural and open lands. Developments on rural land should be compact, and should result in the conservation of unbuilt land. They should also be located to avoid prime farmland. (Comp Plan 2012, Pg. 36);
- R. Encourage existing farms at the edges of the UGB to continue with working agriculture, including homestead buildings. Not only will this keep Ranson and its environs attractive but it will also minimize the cost of importing food for the local economy. Permit the development of agrarian urbanism communities to incentivize working agriculture in conjunction with appropriately scaled development. (Comp Plan 2012, Pg. 84);
- S. Avoid noxious uses in the annexed area. In this case, a 'noxious' use is one which poses a hazard, or which nobody would like to live or have their food grown near and include uses such as: a. Meat packaging and slaughterhouses, b. Incineration, and c. Landfills. (Comp Plan 2012, Pg. 84);
- T. The unincorporated lands within Ranson's Urban Growth Boundary can serve as an agricultural reserve for the town by providing a transition between the built-up town and agriculture on the unincorporated land. The primary economic use for this area should be for land uses that are compatible with agricultural activities. Land in this area should only be annexed into the town as demand arises for moderately compact neighborhood living. It should not be annexed for large-lot development, except as working agriculture. Examples of beneficial land uses that are to be encouraged in the reserve area are: a. Agricultural production, b. Agricultural storage, and c. Eco-tourism and Agri-tourism. (Comp Plan 2012, Pg. 84);
- U. Amend the Zoning Ordinance and the Subdivision Ordinance via the SmartCode to prohibit noxious uses within land annexed into the Urban Growth Boundary. To the extent possible, work with Jefferson County and the State to eliminate noxious uses from land that may be annexed by Ranson. (Comp Plan 2012, Pg. 85);
- V. Develop design guidelines for the land in the Urban Growth Boundary, based on both sound urban design principles and upon ecological and agricultural principles. For example guidelines may cover which land to develop to what level, sightlines, and surveys of karst geology. These may become regulatory or advisory. (Comp Plan 2012, Pg. 85);
- W. Ranson sits on Shenandoah carbonate bedrock with solution channels. These channels are the primary way precipitation gets into the water table. Percolation through the carbonate rock dissolves the rock and enlarges minute fractures. This has produced a karst geology, with caves, sinkholes, springs, "losing" streams, and

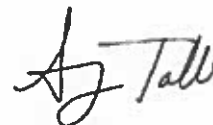
underground streams. Sinkholes are formed when the carbonate rock below the surface is eroded by water, and the surface collapses into a depression. These sinkholes provide an avenue for ground-water recharge. However, they can also sluice stormwater runoff or hazardous materials into the aquifer. Within the Urban Growth Boundary, the groundwater is as little as 25 feet below the surface. As such, an objective is to buffer any hazardous materials and proposed development and direct stormwater runoff, treated or untreated, from sinkholes. This may require a distance buffer. It may also require an engineered solution -- depending on the geology and hydrology. Further, an action is to require adequate planning during the development of land. Given the nature of the karst geology, not to mention that of rivulets leading to streams, a one-size-fits-all approach should be avoided, in favor of sound engineering. (Comp Plan 2012, Pg. 85);

- X. Protect the health of the local watersheds by establishing minimum buffer standards for streams, floodplains and wetlands. (Comp Plan 2012, Pg. 86);

It has been suggested that the authority for this use change as set forth in the Comprehensive Plan can be found on Pg. 30, with the notation as follows: "7. Jefferson Orchard. A proposed relocation of the Duffields MARC station and development of a Transit Oriented D in an intended growth urban area. This area is also proposed for an Industrial Special Industrial District that would utilize the rail access." As the Council surely recalls, the initial development plans for the subject parcel was a transit rail station surrounded by mixed uses, to include light manufacturing and other light industry. This one notation to this specific project, that has been completely abandoned in favor of Rockwool, in no way provides the authority in the Comprehensive Plan for such heavy industry at Jefferson Orchards.

The passage of Ordinance #2017-30, and the resulting industrial use at the Jefferson Orchards parcel, clearly violates the noted provisions of the Comprehensive Plan. **The City Council needs to realize and understand that this proposed Ordinance would not only permit Rockwool to continue to build and ultimately operate, but will invite other such industrial uses.** The Council can reject this proposed Ordinance and protect the remaining land in conformance with the Comprehensive Plan. Notwithstanding, Rockwool can then make its arguments that it should be able to operate as already claimed in the pending Circuit Court Action. The Council must not pass Ordinance #2017-302 based simply on the fact that it previously erred and needs to do so for Rockwool. In that event, Ranson will face claims by its citizens that it rezoned the Jefferson Orchards parcel specifically for Rockwool, and in clear violation of its planning and zoning laws. We are most certain that the citizens of Ranson and Jefferson County will pursue these claims with fervor.

Sincerely,



President
On behalf of the Board of Directors
Jefferson County Vision, Inc.

Enclosures

The Board of Jefferson County Vision is pleased to submit the following information to the Ranson City Council, City Manager and Mayor. We include a letter, the following statements, Comprehensive Plan references and supporting documents as well as an index of those documents that point out the failings of the subject Ordinance #2017-302:

AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: "JEFFERSON ORCHARDS" REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1).

JCV asserts: Changing the classification of land use from SmartCode-New Community to Special District Industrial negatively affects the Ranson and greater Jefferson County community

Proposed Rezoning Would Be Detrimental in the following ways and incompatible to the desired vision of the 2012 Comprehensive Plan for the City of Ranson, West Virginia for with the stated Purpose is:

(Comp Plan, Pg. 4) Chapter 8A-3-1 describes a comprehensive plan as a guide for a governing body: "...to accomplish a **coordinated and compatible development of land and improvements** within its territorial jurisdiction, in accordance with present and future needs and resources. A comprehensive plan is a process through which citizen participation and thorough analysis are used to develop a set of strategies that establish as clearly and practically as possible the best and most appropriate future development of the area under the jurisdiction of the planning commission. A comprehensive plan aids the planning commission in designing and recommending to the governing body ordinances that result in **preserving and enhancing the unique quality of life and culture in that community** and in adapting to future changes of use of an economic, physical or social nature. A comprehensive plan guides the planning commission in the performance of its duties to help achieve sound planning. A comprehensive plan **must promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants**, as well as efficiency and economy in the process of development."

JCV asserts: The Reallocation of Transect Districts, amending the zoning map of the City of Ranson goes against the Code of Ordinances of the City of Ranson, as well as West Virginia State Code.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner is at a detriment to neighbors and the surrounding community.

Enclosure: WV Legislature Zoning Ordinance 8A-7-2

Spot Zoning

Article 1 Compliance

Ranson Roxul MOU

PILOT Agreement

Email Blake Ranson Timeline

JCV asserts: SmartCode land development guidelines support walkable and mixed-use neighborhoods, transportation options as well as the conservation of open lands, local character, housing diversity and vibrant downtowns. The intended TOD (transit overlay district) provides an area within short walking distance of commuter rail or bus transit station, promoting a liveable, walkable community. With the expansion of the Special District Industrial zone - which is only to be assigned to areas that, by their intrinsic size, use or configuration, cannot conform to the requirements on any Transect District or combination of districts - a village on the site is eliminated and the functionality of the TOD is infringed upon.

(Comp Plan, pg. vii) Jefferson Orchard. A proposed relocation of the Duffields MARC station and development of a TOD in an intended growth urban area.

(Comp Plan, pg. iii) A . 1 . RANSON – CHARLES TOWN TRANSPORTATION DEVELOPMENT FEE STUDY Attached by reference.

Enclosure: Ordinance 2017_301 Ranson

NorthPort agreements

2015-06-15 NorthPort Feasibility Study

2015-06-15 NorthPort Executive Summary

2015-06-15 NorthPort Appendices

2011-Ranson-Charles-Town-Development-Fee-Study.pdf

- Pg. 20 – ID 23, Project Name, MARC Train Station Relocation, Project Description, Relocated Duffields train station to Jefferson Orchards development to improve regional access and promote transit-oriented development.

- Pg. 22 – Exhibit 4.5: Initial assessment of Project Priorities
 - Potential Long-Term, ID 23: MARC Train Station Relocation

- Pg. 26 - The Duffields MARC train station project has been identified and includes relocation of the current station closer to Route 9. This project would allow for better regional access and support transit oriented development. The project costs have been estimated assuming the station would be comparable to that at the current location, which consists of a parking lot and a platform for passenger loading. Estimates were developed based on consultant experience in project costs of similar train stations. The costs do not include the construction of station buildings if they should be deemed to be included in the project scope.

JCV asserts: The strengths of the local economy fall under areas of concern, whereas the known hazards of Heavy Industrial Manufacturing and the noncompliance with the Comprehensive Plan can produce a negative impact.

Agriculture

(Comp Plan, Pg. 84) Charles Town/Ranson’s direct relationship with the surrounding agriculture is part of its character and its appeal as a freestanding, independent town. To maintain this positive and appealing relationship in a community, it is necessary to understand the Urban Growth Boundary as more than land that can ultimately be annexed to Ranson. Rather, it is an area of transition within which the more urbanized area of Ranson (and Charles Town) gives way into countryside. Instead of being a blurred transition, it should be a carefully modulated one that includes the contrast between town and country. Ranson’s surroundings will contribute positively to the town’s identity and economy in the following ways:

1. Any agriculture-related employment will continue to be viable in and around Ranson if prime agricultural land is preserved and the “town” is relatively compact (but of course not city-like).
2. Ranson’s position as an attractive destination for visitors will be enhanced by preserving the natural and agricultural landscape.

(Comp Plan 2012, Pg. 36) Protect and enhance the agrarian heritage of land in the Urban Growth Boundary. Such protection is not limited to the physical protection of land, but includes the retention and development of working farms.

(Comp Plan 2012, Pg. 85) Develop design guidelines for the land in the Urban Growth Boundary, based on both sound urban design principles and upon ecological and agricultural principles. For example guidelines may cover which land to develop to what level, sightlines, and surveys of karst geology. These may become regulatory or advisory.

Farmland Preservation

JCV Asserts: Jefferson County's Protected Farmland Grows to 5,455 Acres
In late May and early June, three farms with 748 acres joined the Jefferson County Farmland Protection Program. The Magaha, Ware and McKee families signed their deeds of conservation easement for their properties, completing the process to protect their lands in perpetuity. The new easements increase the amount of protected farmland in Jefferson County to 5,455 acres on 48 farms. More than 90% of the newly protected lands include prime and statewide important agricultural soils. - Jefferson County Farmland Protection Board

(Comp Plan, Pg. 36) Rural Land Objections:

Consolidate development on rural land to preserve agricultural and open lands. Developments on rural land should be compact, and should result in the conservation of unbuilt land. They should also be located to avoid prime farmland.

Rural Land Actions:

Work with the Jefferson County Farmland Protection Board to develop appropriate conservation easements. Such easements should take into account the suitability of land for agricultural use, including considerations to do with soil and runoff. In addition, Jefferson County and Ranson should agree upon policies that ensure that urbanized land and working farmland do not interfere with each other. Such arrangements may include buffers against odor and runoff and community-supported agriculture

Tourism -

(Comp plan, pg. 91) Economic Development - Regional assets center around tourism, transportation, and affordability.

Enclosure: Historic Resources

Statement_Appalachian Trail Conservancy

Close proximity to nearby schools and communities

JCV asserts: The Jefferson Orchards site is within 2.9 miles of 4 public schools, in addition to the Children's 1st day care Center where 30% of the county's children attend. Air pollution is well documented to decrease the lung function, exacerbate asthma and is neurotoxic to developing children. Children are often at greater risk of adverse health impacts of pollutants than adults.

(Comp Plan 2012, Pg. 84) Avoid noxious uses in the annexed area. In this case, a 'noxious' use is one which poses a hazard, or which nobody would like to live or have their food grown near and include uses such as: a. Meat packaging and slaughterhouses, b. Incineration, and c. Landfills.

Enclosure: Ambient Air Pollution Health Hazards to Children:

- pages 1699-1702 (first 4 pages of document)

Proximity to schools

<https://www.lung.org/clean-air/outdoors/who-is-at-risk/children-and-air-pollution>

<https://www.frontiersin.org/articles/10.3389/fnhum.2014.00613/full>

<https://www.theguardian.com/environment/2018/oct/29/air-pollution-worlds-children-breathing-toxic-air-who-study-finds>

Rockwool Pediatric Health Concerns

JCV Asserts: Industry creates negative Impacts to the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, factors the Comp Plan is protecting .

Enclosure: Fifteen facts to oppose Rockwool

Rockwool Ranson WV Information Sheet

Air pollution and Effects on Health:

Enclosure: Effect of inversions on aerosol condensation:

- pages 898 and 899, (first two pages of the document)

Groundwater contamination and Sinkholes -

JCV asserts: Jefferson County, and therefore Ranson, has an abundance of fractures and other features within the carbonate bedrock, known as Karst, where channels that have formed provide conditions that have the potential to quickly carry surface contaminants from the surface, or through sinkholes to the groundwater below and aquifers. 76 percent of Jefferson County residents rely on groundwater supplies for private drinking water sources.

Enclosure: Sinkholes on Jefferson Orchards

Sinkholes Jefferson County

Shepherd IES Approximate sinkhole locations

Jeff Co water sewer detail

- Pg. 107 & 108, Jefferson County maps **40%** of sewer service and only **24%** of water *provided* by existing sewer and water facilities.

Served and Unserved structures for Water and Sewer

- Pg. 65 summarizes the structures served for every county in the state.

From: 2017 Needs Assessment: WV IJDC:

<http://www.wvinfrastructure.com/pc/policy-procedures.php>

Weaknesses of karst

(Comp Plan, pg. 91) Develop design guidelines for the land in the Urban Growth Boundary, based on both sound urban design principles and upon ecological and agricultural principles. For example guidelines may cover which land to develop to what level, sightlines, and surveys of karst geology. These may become regulatory or advisory.

(Comp Plan 2012, Pg. 85)

4 . 5 . 1 GEOLOGY AND HYDROLOGY

Ranson sits on Shenandoah carbonate bedrock with solution channels. These channels are the primary way precipitation gets into the water table. Percolation

through the carbonate rock dissolves the rock and enlarges minute fractures. This has produced a karst geology, with caves, sinkholes, springs, “losing” streams, and underground streams. Sinkholes are formed when the carbonate rock below the surface is eroded by water, and the surface collapses into a depression. These sinkholes provide an avenue for ground-water recharge. However, they can also sluice stormwater runoff or hazardous materials into the aquifer. Within the Urban Growth Boundary, the groundwater is as little as 25 feet below the surface. As such, an objective is to buffer any hazardous materials and proposed development and direct stormwater runoff, treated or untreated, from sinkholes. This may require a distance buffer. It may also require an engineered solution -- depending on the geology and hydrology. Further, an action is to require adequate planning during the development of land. Given the nature of the karst geology, not to mention that of rivulets leading to streams, a one-size-fits-all approach should be avoided, in favor of sound engineering.

Geology and Hydrology Objectives

1. Buffer any hazardous materials and proposed development and direct stormwater runoff, treated or untreated, from sinkholes. This may require a distance buffer. It may also require an engineered solution – depending on the geology and hydrology.

Geology and Hydrology Actions

1. Require adequate planning during the development of land. Given the nature of the karst geology, not to mention that of rivulets leading to streams, a one-size-fits-all approach should be avoided, in favor of sound engineering.

Letters of Opposition

(Comp Plan 2012, Pg. 33) Engage the whole community in planning constructively. While the needs of particular stakeholders and neighboring property owners must be considered, projects should be planned with the wider community in mind.

Enclosure: Citizen Groups Opposed to Rockwool

CHAPTER 8A. LAND USE PLANNING.

ARTICLE 7. ZONING ORDINANCE.

§8A-7-2. Contents of zoning ordinance.

(a) The following must be considered when enacting a zoning ordinance:

- (1) Promoting general public welfare, health, safety, comfort and morals;
- (2) A plan so that adequate light, air, convenience of access and safety from fire, flood and other danger is secured;
- (3) Ensuring attractiveness and convenience is promoted;
- (4) Lessening congestion;
- (5) Preserving historic landmarks, sites, districts and buildings;
- (6) Preserving agricultural land, and
- (7) Promoting the orderly development of land.

(b) A zoning ordinance may include the following:

- (1) Regulating the use of land and designating or prohibiting specific land uses;
- (2) Authorizing flexible planning standards to create, redevelop, reuse, protect and enhance the physical qualities of the community;
- (3) Designating historic districts and regulating the uses of land and the design of buildings within the historic district;
- (4) Establishing corridor overlay districts to achieve land design goals and regulating the uses of land within the corridor overlay districts;
- (5) Establishing design standards and site plan approval procedures;
- (6) Dividing the land of the governing body into different zone classifications regulating the use of land, establishing performance standards for various land uses when dividing is not desired or any combination of both;
- (7) Authorizing overlay districts and special design districts within which specific additional development standards for each permitted, accessory and conditional use shall apply;
- (8) Regulating the height, area, bulk, use and architectural features of buildings, including reasonable exterior architectural features and reasonable aesthetic standards for factory-built homes;
- (9) Authorizing a process and standards for factory-built homes: Provided, That a governing body is prohibited from establishing a process and standards for regulating factory-built homes that is more restrictive than a process and standards for site-built homes;
- (10) Preserving green spaces and requiring new green spaces, landscaping, screening and the preservation of adequate natural light;
- (11) Regulating traffic flow and access, pedestrian flow and access, parking and loading;
- (12) Identifying flood-prone areas subject to periodic flooding and regulating with specific control the permitted use, type of construction and height of floor levels above base flood elevation permitted in the area so as to lessen or avoid the hazards to persons and damage to property resulting from the accumulation of storm or flood waters;
- (13) Designating an airport area and establishing land-use regulations within a specific distance from the boundaries of the airport;
- (14) Authorizing planned unit developments to achieve more efficient use of land and setting standards and regulations for the developments; and
- (15) Identifying, establishing and designating urban growth boundaries, as defined in section four-a, article six, chapter eight of this code, for municipalities.

(c) A zoning ordinance shall:

- (1) Create a board of zoning appeals;
- (2) Specify certification requirements for zoning district maps that are consistent with the governing body's comprehensive plan;
- (3) Adopt procedures and requirements for nonconforming land uses;
- (4) Adopt procedures and requirements for variances; and
- (5) Adopt procedures and requirements for conditional use permits.

WVU**LAW**

LAND USE & SUSTAINABLE DEVELOPMENT LAW CLINIC

SPOT ZONING

Spring 2020

Definition¹

The process of singling out a parcel(s) for a use classification different and inconsistent with the surrounding area, for the benefit of a particular owner.

When Does Spot Zoning Occur?

Spot zoning typically occurs when a landowner wants to use land for a use prohibited by the existing zoning and land is rezoned to a less restrictive zoning classification, such as a change from a residential to commercial zoning district. Neighboring landowners may contest the rezoning by arguing that the less restrictive classification is a detriment to neighbors and the surrounding community.

Spot zoning also occurs when the change in zoning departs from the city or county's comprehensive plan to benefit a private landowner. However, not every departure from a comprehensive plan constitutes spot zoning, and not every parcel zoned differently from surrounding parcels is spot zoning. A zoning amendment must promote public health, safety, or welfare.

Considerations

A planning commission and governing body should review any proposed zoning amendment carefully. Questions should include:

- Is the zoning amendment consistent with the comprehensive plan?²
- Is the requested use or zoning district significantly different from the surrounding area?
- Is the zoning amendment benefiting private persons rather than providing public benefit?
- Will the use benefit one or a few landowners while creating negative impacts to surrounding landowners?
- Does the zoning amendment make good sense in light of the facts involved?



Rezoning

- Should promote public interest in some demonstrable way as required for all local government laws
- Should remain consistent with the comprehensive plan
- Should *not* benefit private property interests in ways that are counter to the public interest

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Footnotes

¹ Anderson's American Law of Zoning, 4th Ed., § 5.12 (1995).

² W. Va. Code §§ 8A-7-8, 8A-7-9 (West 2020).

Examples: What Is and Isn't Spot Zoning?

Spot Zoning

A 33-acre parcel of land was zoned A-1, Agricultural-Rural, and was completely surrounded by other land zoned A-1. Wanting to build a truck repair shop, the landowners petitioned to have the parcel rezoned to B-1, General Business. The county commissioners granted the rezoning, based on the advice of the planning commission. Neighboring property owners appealed the rezoning, claiming that it was spot zoning. The county circuit court found that the property had been spot zoned for the following reasons:

1. The property was not indistinguishable from surrounding properties;
2. The comprehensive plan showed future use of the property as residential rather than commercial;
3. The rezoning was for the sole benefit of the property owners; and
4. The rezoning did not support a reasonable relationship to health, safety, or general welfare of the community.

Not Spot Zoning

A city lot was zoned R-2, Residential. Wanting to construct a building for five individual businesses (drugstore, hardware store, grocery store, bakery, and beauty salon), the landowner petitioned to have the parcel rezoned to B-3, Business. More than seventy neighborhood residents opposing the application filed a petition with the city council. Despite opposition, the city council voted to approve the zoning amendment because there was a need for a shopping center within the community and it was the city council's policy to encourage decentralization of business in order to relieve traffic congestion.

The neighborhood opposition contested the rezoning and the circuit court found that the city council's actions amounted to spot zoning. On appeal to the state Supreme Court, the decision was reversed. It was held that the city council did not abuse their discretion in granting the zoning amendment because the decision was justified as furthering the city's properly adopted comprehensive plan and served the best interests of the community as a whole. Additionally, there was no evidence that property values would be affected.



Article 1

General

ARTICLE 1. GENERAL TO ALL PLANS

1.1 Authority and Applicability

- 1.1.1 Authority. This chapter is adopted pursuant to authority granted to West Virginia municipalities by W. Va. Code, § 8A-7-1 et seq.
- 1.1.2 Enactment. For the purposes cited above and for the general purposes of promoting the health, safety, and general welfare of the citizens of the City, the City Council hereby ordains, adopts and enacts this Chapter in its entirety, including text, map, and all regulations, all of which shall be known as the City of Ranson SmartCode. This chapter shall apply to land within the corporate limits of the corporation, as shown on the official zoning map or described by ordinance.
- 1.1.3 Conflicting ordinances. All ordinances or parts of ordinances in conflict with this chapter or inconsistent with its provisions, including, but not limited to, Chapters 16, 17 and 19 of the City of Ranson Code of Ordinances, are hereby repealed and superseded to the full extent necessary to give this chapter full force and effect.
- 1.1.4 Severability. Should any provision of this be declared invalid or unconstitutional by a court of competent jurisdiction, such declaration shall not affect this chapter as a whole or any part hereof except that specific provision which was the subject of the declaration.
- 1.1.5 Construction. The following general rules of construction shall apply to regulations governing the SmartCode Chapter:
- Numerical metrics shall take precedence over graphic metrics.
 - The diagrams and illustrations within this Chapter, unless specifically noted as advisory, are considered regulatory in nature and are legally binding.
 - The definition of a term in this section shall take precedence over the definition of the same term elsewhere in the City of Ranson Code of Ordinances.
- 1.1.6 Terms used throughout this Chapter may be defined in Section 1.7 Definitions. Section 1.7 Definitions contains regulatory language that is integral to this Chapter. Those terms not defined in Section 1.7 Definitions shall be accorded their commonly accepted meanings. In the event of conflicts between these definitions and other definitions in the City of Ranson Code of Ordinances, those of this Chapter shall take precedence.
- 1.1.7 The metrics of the standards and tables are an integral part of this Chapter. However, the diagrams and illustrations that accompany them should be considered guidelines, with the exception of those on Table 11. T2O Standards, Table 12. T3 Standards, Table 13. T4 / T4O Standards, and Table 14. T5L / T5 Standards, which are also legally binding.

1.2 Intent

- 1.2.1 The intent and purpose of this Chapter is to enable, encourage and qualify the implementation of the region, the community, the block and the building, and the Transect.
- 1.2.2 The city
- That the city should retain its natural infrastructure and visual character derived from topography, woodlands, farmlands, and riparian corridors.
 - That growth strategies should encourage Infill and redevelopment in parity with new communities.
 - That development contiguous to urban areas should be structured in the pattern of Town Center (TCT) or Village (VIL) and be integrated with the existing urban pattern.
 - That development non-contiguous to urban areas should be organized in the pattern of Hamlet (HAM) or VIL.

Article 1

General

2

- e. That affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.
- f. That transportation corridors should be planned and reserved in coordination with land use.
- g. That green corridors should be used to define and connect the urbanized areas.
- h. That the city should include a framework of transit, pedestrian, and bicycle systems that provide alternatives to the automobile.

1.2.3 The community

- a. That neighborhoods and town centers should be compact, pedestrian-oriented and mixed use.
- b. That neighborhoods and the town centers should be the preferred pattern of development and that districts specializing in a single use should be the exception.
- c. That ordinary activities of daily living should occur within walking distance of most dwellings, allowing independence to those who do not drive.
- d. That interconnected networks of thoroughfares should be designed to disperse traffic and reduce the length of automobile trips.
- e. That within neighborhoods, a range of housing types and price levels should be provided to accommodate diverse ages and incomes.
- f. That appropriate building densities and land uses should be provided within walking distance of transit stops.
- g. That civic, institutional, and commercial activity should be embedded in the town center and neighborhoods, not isolated in remote single-use complexes.
- h. That schools should be sized and located to enable children to walk or bicycle to them.
- i. That a range of open space including parks, squares, and playgrounds should be distributed within neighborhoods and the town center.

1.2.4 The block and the building

- a. That buildings and landscaping should contribute to the physical definition of thoroughfares as civic places.
- b. That development should adequately accommodate automobiles while respecting the pedestrian and the spatial form of public areas.
- c. That architecture and landscape design should grow from local climate, topography, history, and building practice.
- d. That buildings should provide their inhabitants with a clear sense of geography and climate through energy efficient methods.
- e. That civic buildings and public gathering places should be provided as locations that reinforce community identity.
- f. That civic buildings should be distinctive and appropriate to a role more important than the other buildings that constitute the fabric of the city.
- g. That the preservation and renewal of historic buildings should be facilitated, to affirm the continuity and evolution of society.

1.2.5 The Transect

- a. That communities should provide meaningful choices in living arrangements as manifested by distinct physical environments.
- b. That the Transect District descriptions in Section 1.4 Transect Districts shall constitute the intent of this Chapter with regard to the general character of each of these environments.

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1.3 Rezoning

- 1.3.1 General Procedures: This section shall be administered in accordance with the procedural requirements of Chapter 16 (Planning and Development) and Chapter 19 (Zoning) of the City of Ranson Code of Ordinances except when those requirements conflict with this section.
- 1.3.2 Re-zoning Procedures: The procedure for rezoning to SmartCode new community (SC-NC) or Transect Districts (T1, T2, T3, T4, T5) as part of an infill community plan or as standalone Transect Districts (T1, T2, T3, T4, T5) shall be the same as required for any other zoning district change:
- 1.3.3 Re-zoning Application Requirements
- a. Application for rezoning to a SmartCode-New Community District shall include all of the following:
 - i. applicant's name, address, interest in affected property. If the applicant is not the owner, a letter from the owner, a signature on the application, or a power of attorney shall be required for the applicant to act as agent with full authority.
 - ii. description of property
 - iii. map of property to be rezoned including topography at a maximum of 20-foot contour intervals, using USGS topography or other available topographic survey and established or approximated 100-year flood plain limits as shown on the official FEMA flood insurance maps.
 - iv. existing property lines with dimensions
 - v. adjoining streets and widths
 - vi. existing structures
 - vii. existing use of land
 - viii. current zoning of land and adjoining properties
 - ix. proposed points of connection for off-site thoroughfares
 - x. proposed maximum density
 - xi. proposed community unit type(s)
 - xii. proposed designation of transect districts at perimeter (1 lot deep)
 - xiii. statement as to how the re-zoning request is consistent with the City of Ranson Comprehensive Plan.
 - b. Application for rezoning to Transect Districts (T1-5) as part of an infill community plan shall include all of the following:
 - i. applicant's name, address, interest in affected property
 - ii. description of property
 - iii. map of property to be rezoned including topography at a maximum of 20-foot contour intervals, using USGS topography or other available topographic survey and established or approximated 100-year flood plain limits as shown on the official FEMA flood insurance maps.
 - iv. existing property lines with dimensions
 - v. adjoining streets and widths
 - vi. existing structures
 - vii. existing use of land
 - viii. current zoning of land and adjoining properties
 - ix. proposed points of connection for off-site thoroughfares
 - x. proposed maximum density
 - xi. proposed community unit type(s)

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- xii. proposed designation of transect districts
 - xiii. statement as to how the re-zoning request is consistent with the City of Ranson Comprehensive Plan.
 - xiv. infill land development plan and plat shall be submitted and approved as part of a rezoning application to Transect Districts, pursuant to the requirements of Sec. 4.1.3.
- c. Application for rezoning to a Transect District (T1-5) not as part of an infill community plan shall include all of the following:
- i. applicant's name, address, interest in affected property. If applicant is not owner, a letter from the owner, signature on the application, or power of attorney shall be required for applicant to act as agent with full authority.
 - ii. description of property
 - iii. map of property to be rezoned including topography at a maximum of 20-foot contour intervals, using USGS topography or other available topographic survey and established or approximated 100-year flood plain limits as shown on the official FEMA flood insurance maps.
 - iv. existing property lines with dimensions
 - v. adjoining streets and widths
 - vi. existing structures
 - vii. existing use of land
 - viii. current zoning of land and adjoining properties
 - ix. proposed points of connection for off-site thoroughfares
 - x. proposed maximum density
 - xi. proposed designation of transect districts
 - xii. statement describing how the requested change enhances the surrounding neighborhood structure per Section 1.2 Intent.
 - xiii. statement as to how the re-zoning request is consistent with the Comprehensive Plan.
- 1.3.4 An applicant for a SmartCode-New Community District may elect to combine their rezoning and land development plan processes.
- 1.3.5 Within the G1, G2 and G3 Sectors, the following acreage requirements are necessary for any rezoning to the SmartCode New Community District (SC-NC):
- a. Hamlet (HAM): 10 – 50 acres per HAM
 - b. Village (VIL): No fewer than 40 acres and no more than 200 acres per VIL
- 1.3.6 Within the G3 Sector, the following acreage requirements are necessary for any rezoning to the SmartCode new community (SC-NC):
- a. Town Center (TCT): No fewer than 40 acres and no more than 200 acres per TCT. Multiple Community Units may be included in one rezoning request, provided each Community Unit meets its acreage requirements.
- 1.3.7 Once the City Council approves a rezoning under this Chapter, the parcel(s) shall be designated SC-NC (SmartCode –New Community) on the City of Ranson zoning map until approval of the land development plan and plat by the Planning Commission pursuant to 3.1.5 or 4.1.1. Once the Planning Commission approves land development plan and plat, specific transect districts shall replace the SC-NC designation on the official zoning map as part of the Planning Commission's approval of the land development plan and plat, so long as the allocation of zoning districts within the land development plan and plat are consistent with Table 3 of this Chapter and the original rezoning to SC-NC. The parcel(s) shall be

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designated T1 (Natural), T2 (Rural), T3 (Sub-Urban), T4 (General Urban), T5 (Urban Center), or SD (Special District) on the City of Ranson zoning map. The replacement of specific transect zones on the official zoning map shall not be considered a zoning amendment pursuant to W. Va. Code 8A-7-8 or 8A-7-9; thus, the placement of transect zones does not require further action of the Planning Commission or City Council. Transect zone placement shall be considered a continuation of the original SC-NC rezoning process that was originally approved by official action of the Planning Commission and City Council pursuant to W. Va. Code 8A-7-8 or 8A-7-9. So long as the applicant complies with Table 3 of this Chapter, the transect districts may be relocated within the parcel(s) administratively and on the official zoning map until final plat approval. Once the final plat is approved pursuant to 5.1.8.g, transect districts may not be relocated and may only be amended through the City's rezoning process. This Chapter shall be the exclusive and mandatory zoning regulation, and its provisions shall be applied in their entirety.

1.4 Transect Districts

- 1.4.1 Zoning districts under this Chapter are limited to the following Transect District designations:
- a. **T5 Urban Center (T5)**: This district consists of higher density mixed-use buildings that accommodate retail, offices, townhouses and apartments. It has a tight network of thoroughfares, with wide sidewalks, regularly spaced street tree planting and buildings set close to the sidewalks
 - b. **T4 General Urban (T4)**: This district includes a mix of uses but is primarily mixed density residential. It may have a wide range of building types: houses, townhouses, duplexes, small apartment buildings, and live-work units. Setbacks and landscaping are variable. Streets and sidewalks define medium-sized blocks
 - c. **T3 Sub-Urban (T3)**: This district consists of low density residential areas, with some mix of use, home occupations and outbuildings. Street and yard planting are naturalistic and building setbacks are relatively deep. Blocks may be large and thoroughfare networks irregular.
 - d. **T2 Rural (T2)**: This district consists of sparsely settled lands in open or cultivated states. These include woodland, agricultural land, and pasture. Typical buildings are farmhouses and agricultural buildings. Roads are rural in character had have no pedestrian facilities. Landscaping is naturally occurring.
 - e. **T1 Natural (T1)**: This district consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation. Public parks may occur, but general development is prohibited.
- 1.4.2 All or a portion of the property within a designated Transect District may be further subject to the following sub-districts:
- a. **T-2 Open (T2O)**: a transition district modifying a T4 frontage on a T2 parcel by permitting agricultural uses at the rear of the lot, and limiting block perimeter requirements.
 - b. **T-4 Open (T4O)**: a transition district modifying T4 by permitting more commercial uses.
 - c. **T-5 Limited (T5L)**: a transition district modifying T5 by limiting allowable commercial uses.
- 1.4.3 The following special districts are designated for uses and configurations that are incompatible with transect districts, but that are consistent with Section 1.2 Intent:
- a. **Business Special District (SDB)**: a primarily single-use district for business, manufacturing, warehousing and light industrial uses.

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b. **Industrial Special District (SDI):** a primarily single-use district for heavy industry, manufacturing, and large employment complexes.

1.4.4 All or a portion of the property within a designated transect district may be further subject to the following overlay districts:

a. **Transit Overlay District (TOD):** an area within a short walking distance of a commuter rail, light rail, or bus rapid-transit station. The TOD modifies transect districts by increasing density and height, and reducing parking requirements.

1.5 Deviations

1.5.1 The City of Ranson hereby creates a Consolidated Review Committee ("CRC") comprised of a member from Planning, Public Works, Police, the City Manager or his/her designee, and a member of the Parks and Recreation Commission, to process administratively applications and plans for proposed projects.

1.5.2 There shall be two types of deviation from the requirements of this Chapter: administrative waivers and variances. Whether a deviation requires an administrative waiver or variance shall be determined by the City Manager or his designee.

1.5.3 Administrative Waivers

a. An administrative waiver is a ruling that would permit a practice that is not consistent with a specific provision of this Chapter but is justified by the provisions of Section 1.2. The City Manager or his designee or his designee shall have the authority to approve or disapprove administratively a request for an administrative waiver.

b. **General Standards.** No administrative waiver shall be approved unless the City Manager or his designee shall find:

- i. The administrative waiver is consistent with Section 1.2 Intent of this Chapter.
- ii. The administrative waiver is consistent with the Comprehensive Plan.
- iii. The administrative waiver will not materially endanger the public health or safety or constitute a public nuisance if located where proposed and developed according to the plans and information submitted and approved.
- iv. The administrative waiver will not substantially injure the value of adjoining property, or that the use is a public necessity.
- v. The location and character of the use, if developed according to the plans and information approved, will be in harmony with proximate land uses, and consistent with the purposes of the district.
- vi. The administrative waiver will advance the presence of the intended form of the development.
- vii. The administrative waiver will advance pedestrian friendly activity.
- viii. The administrative waiver will provide for the enhancement, coordination or demarcation between the public and private realm.

c. **Specific Standards.** Items eligible for administrative waivers have specific standards in the sections of the Chapter related to those items.

d. Any decision regarding a grant or denial of an administrative waiver shall in writing state the reasons for the grant or denial and shall be delivered to the applicant by either first class mail or electronically.

- i. Appeals of City Manager or his designee or CRC denials may be made to the Board of Zoning Appeals (BZA).

1.5.4 Variances

a. For variances, the standards and procedures in Chapter 16 Planning and Development

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and Chapter 19 Zoning shall apply.

- 1.5.5 The request for an administrative waiver or variance shall not subject the entire application to public hearing, but only that portion necessary to rule on the specific issue requiring the relief.

1.6 Incentives

- 1.6.1 To encourage the use of this Chapter, the City Council grants the following incentives, to the extent authorized by state law:
- Applications under this Chapter shall be processed with priority over those under Chapter 19, including those with earlier filing dates.
 - The City may waive all application fees.
 - The City shall waive the public hearing at site plan approval stage.
 - Land development plan and plat shall not be required to contain as much detailed engineering information as in the sketch plan phases in TND districts.
 - Consolidated rezoning and land development plan and plan hearings may be held simultaneously at option of applicant if required information is provided and compliant the the appropriate article.

1.7 Definitions

This Section provides definitions for terms in this Chapter that are technical in nature or that otherwise may not reflect a common usage of the term.

A-Grid: cumulatively, those thoroughfares that by virtue of their pre-existing pedestrian-supportive qualities, or their future importance to pedestrian connectivity, are held to the highest standards prescribed by this Chapter. See b-grid. (Syn: primary grid / street.)

Access Lane: an outer vehicular lane or lanes of a thoroughfare, designed for slow speeds and separated from inner lanes that carry higher speed traffic by a planted median. (Syn: access lane, service lane)

Accessory Building: a structure which is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure. For example a residential structure may have a detached garage, storage shed, or guest house.

Adjusted Pedestrian Shed: a pedestrian shed that has been adjusted according to Section 3.2, creating the regulatory boundary of a community unit.

Allee: a regularly spaced and aligned row of trees usually planted along a thoroughfare or path.

Arcade: a private frontage conventional for retail use wherein the facade is a colonnade supporting habitable space that abuts the sidewalk, while the facade at sidewalk level is setback, providing a private frontage sidewalk.

Avenue (AV): a thoroughfare of high vehicular capacity and low to moderate speed, acting as a short distance connector between urban centers, and usually equipped with a landscaped median.

B-grid: cumulatively, those thoroughfares that by virtue of their use, location, or absence of pre-existing pedestrian-supportive qualities, may meet a standard lower than that of the a-grid. See a-grid. (Syn: secondary grid / street.)

Bed and breakfast: an owner-occupied lodging type offering 1 to 6 bedrooms, permitted to serve breakfast in the mornings to guests.

Bicycle lane (BL): a dedicated lane for cycling within a moderate-speed vehicular thoroughfare, demarcated by striping.

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Bicycle route (BR): a thoroughfare suitable for the shared use of bicycles and automobiles moving at low speeds.

Bicycle trail (BT): a bicycle way running independently of a vehicular thoroughfare.

Block: the aggregate of private lots, passages, rear alleys and rear lanes, circumscribed by thoroughfares.

Block face: the aggregate of all the building facades on one side of a block.

Boulevard (BV): a thoroughfare designed for high vehicular capacity and moderate speed, traversing an urbanized area. Boulevards are usually equipped with access lanes buffering sidewalks and buildings.

Caliper: diameter of a tree trunk. The term "caliper" is used for trees less than twelve (12) inches in diameter. For trees less than four (4) inches in diameter, it is measured six (6) inches from the ground. For trees between four (4) inches and twelve (12) inches in diameter, it is measured twelve (12) inches from the ground.

CRC: Consolidated Review Committee. See Section 1.5.1.

Civic: the term defining not-for-profit organizations dedicated to arts, culture, education, recreation, government, transit, and municipal parking.

Civic building: a building operated by not-for-profit organizations dedicated to arts, culture, education, recreation, government, transit, and municipal parking, or for use approved by the legislative body.

Civic parking reserve: Parking structure or parking lot within a quarter-mile of the site that it serves.

Civic space: an outdoor area permanently dedicated for public use. Civic space types are defined by the combination of certain physical constants including the relationships among their intended use, their size, their landscaping and their enfronting buildings.

Commercial: the term collectively defining workplace, office, retail, and lodging uses.

Common destination: An area of focused community activity, usually defining the approximate center of a pedestrian shed. It may include without limitation one or more of the following: a civic space, a civic building, a commercial center, or a transit station, and may act as the social center of a neighborhood.

Common lawn: a planted private frontage wherein the facade is set back from the frontage line. It is visually continuous with adjacent yards.

Community plan area: an area marked on a land use map activating the use of this Chapter.

Community unit: a regulatory category defining the physical form, density, and extent of a settlement. The three community unit types addressed in this Chapter are HAM, VIL, and TCT. The context for these community units may be infill or greenfield.

Configuration: the form of a building, based on its massing, private frontage, and height.

Consolidated review committee (CRC): Part of the Community Development Department, a CRC is comprised of a representative from each of the various regulatory agencies that have jurisdiction over the permitting of a project. See Section 1.5.1.

Critical Root Zone (CRZ): a circular area centered on the trunk of an existing tree that has a radius of twelve (12) inches to every inch of diameter at breast height (DBH) of the tree.

Developable areas: lands other than those in the O-1 preserved open sector and T1 Natural Transect District.

Diameter at breast height (DBH): a standard method of expressing the diameter or the trunk or bole of a standing (existing) tree measured 4.5 feet [1.3 m] above ground in existing tree surveys.

Drive: a thoroughfare along the boundary between an urbanized and a natural condition, usually along a waterfront, park, or promontory. One side has the urban character of a thoroughfare, with sidewalk

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and building, while the other has the qualities of a road or parkway, with naturalistic planting and rural details.

Effective parking: the amount of parking required for mixed use after adjustment by the parking occupancy rate.

Effective turning radius: the measurement of the inside turning radius taking parked cars into account.

Elevation: an exterior wall of a building not along a frontage line. See: facade.

Encroach: to break the plane of a vertical or horizontal regulatory limit with a structural element, so that it extends into a setback, into the public frontage, or above a height limit.

Encroachment: any structural element that breaks the plane of a vertical or horizontal regulatory limit, extending into a setback, into the public frontage, or above a height limit.

Expression line: a line prescribed at a certain level of a building for the major part of the width of a facade, expressed by a variation in material or by a limited projection such as a molding or continuous balcony. (Syn: transition line.)

Facade: the exterior wall of a building that is set along a frontage line. See elevation.

Flag lot: A parcel having the configuration of an extended flag and pole. The pole represents the width of the principal building and side setbacks and the rear of the lot is located to the rear of another lot fronting a main street. Flag lots only providing egress to a parcel behind are prohibited. The lot must be wide enough to accommodate the principal building at the frontage line.

Forecourt: a private frontage wherein a portion of the facade is close to the frontage line and the central portion is set back.

Frontage: the area between a building facade and the vehicular lanes, inclusive of its built and planted components. Frontage is divided into private frontage and public frontage.

Frontage buildout: the percentage of the lot width that is occupied by the building facade at the front setback.

Frontage line: a lot line bordering a public frontage. Facades facing frontage lines define the public realm and are therefore more regulated than the elevations facing other lot lines.

Gallery: a private frontage conventional for retail use wherein the facade is aligned close to the frontage line with an attached cantilevered shed or lightweight colonnade overlapping the sidewalk.

Green: a civic space type for unstructured recreation, spatially defined by landscaping rather than building frontages.

Greenfield: an area that consists of open or wooded land or farmland that has not been previously developed.

Growth sector: one of four sectors where development is permitted by right in this Chapter, three for new communities and one for infill.

Hamlet (HAM): a community unit type structured by a short or standard pedestrian shed oriented toward a common destination such as a general store, meeting hall, schoolhouse, and / or church. A hamlet takes the form of a small settlement standing free in the countryside. (Syn: conservation land development, cluster) (Regional example: Hillsboro, VA)

Highway: a rural and suburban thoroughfare of high vehicular speed and capacity. This type is allocated to the more rural Transect Districts (T-1, T-2, and T-3).

Infill: *noun* - new development on land that had been previously developed, including most greyfield and brownfield sites and cleared land within urbanized areas. *verb*- to develop such areas.

Infill VIL: a community unit type within an urbanized, greyfield, or brownfield area based on a standard

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pedestrian shed and consisting of T-3, T-4, and/or T-5 Districts. (Var: neighborhood.)

- 10 Inn:** a lodging type, offering 7 to 12 bedrooms, permitted to serve breakfast in the mornings to guests.
- Land development:** the development of one or more lots, tracts or parcels of land by any means and for any purpose, but does not include easements, rights-of-way or construction of private roads for extraction, harvesting or transporting of natural resources.
- Land development plan and plat:** a zoning map or set of maps that shows the Transect Districts, civic zones, special districts if any, and special requirements if any, of areas subject to, or potentially subject to, regulation by this Chapter.
- Landscape area:** the area of a lot or parcel exclusive of building footprints, driveway and walkway pavements, and other impervious hardscape areas, and inclusive of ponds, pools and water features.
- Layer:** a range of depth of a lot within which certain elements are permitted.
- Lightwell:** A private frontage type that is a below-grade entrance or recess designed to allow light into basements. (Syn: light court.)
- Liner building:** a building specifically designed to mask a parking lot or a parking structure from a frontage.
- Live-work:** a mixed use unit consisting of a commercial and residential use. The commercial use may be anywhere in the unit. (Syn.: flexhouse.)
- Lodging:** premises available for daily and weekly renting of bedrooms.
- Lot coverage:** the percentage of a lot that is covered by buildings and other roofed structures.
- Main civic space:** the primary outdoor gathering place for a community. The main civic space is often, but not always, associated with an important civic building.
- Manufacturing:** premises available for the creation, assemblage and/or repair of artifacts, using table-mounted electrical machinery or artisanal equipment, and including their retail sale.
- Meeting hall:** a building available for gatherings, including conferences.
- Mixed use:** multiple uses within the same building through superimposition or adjacency, or in multiple buildings by adjacency, or at a proximity determined by warrant.
- Neighborhood Multipurpose Field:** a civic space type for structured recreation and stormwater management. It may be spatially defined by landscaping rather than building frontages.
- Net site area:** all developable land within a site including thoroughfares but excluding land allocated as civic districts and/or T1 and/or T2.
- Office:** premises available for the transaction of general business but excluding retail, artisanal and manufacturing uses.
- Old Town:** As delineated on official zoning map.
- Open space:** land intended to remain undeveloped; it may be for civic space.
- Outbuilding:** an accessory building, usually located toward the rear of the same lot as a principal building.
- Park:** a civic space type that is a natural preserve available for unstructured recreation.
- Passage (PS):** a pedestrian connector, open or roofed, that passes between buildings to provide shortcuts through long blocks and connect rear parking areas to frontages.
- Path (PT):** a pedestrian way traversing a park or rural area, with landscape matching the contiguous open space, ideally connecting directly with the urban sidewalk network.
- Pedestrian shed:** An area that is centered on a common destination. Its size is related to average

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walking distances for the applicable community unit type. Pedestrian sheds are applied to structure communities. See standard, long, or linear pedestrian shed. (Syn: walkshed, walkable catchment.)

Linear pedestrian shed: A pedestrian shed that is elongated along an important mixed use corridor such as a main street. A linear pedestrian shed extends approximately 1/4 mile from each side of the corridor for the length of its mixed use portion. The resulting area is shaped like a lozenge. It may be used to structure a VIL, TCT, infill VIL, or infill TCT. (Syn: elongated pedestrian shed.)

Long pedestrian shed: a pedestrian shed that is an average 1/2 mile radius or 2640 feet, used when a transit stop (bus or rail) is present or proposed as the common destination. A long pedestrian shed represents approximately a ten-minute walk at a leisurely pace. It is applied to structure a TOD overlay.

Short pedestrian shed: a pedestrian shed that is an average 1/6 mile radius or 792 feet, about the distance of a three-minute walk at a leisurely pace. Short pedestrian sheds are common for hamlets or areas with steep topography.

Standard pedestrian shed: a pedestrian shed that is an average 1/4 mile radius or 1320 feet, about the distance of a five-minute walk at a leisurely pace.

Planter: the element of the public frontage which accommodates street trees, whether continuous or individual.

Plat: a map of the land development.

Playground: an open space designed and equipped for the recreation of children.

Plaza: a civic space type designed for civic purposes and commercial activities in the more urban Transect Districts, generally paved and spatially defined by building frontages.

Principal entrance: the main point of access for pedestrians into a building.

Principal frontage: On corner lots, the private frontage designated to bear the address and principal entrance to the building, and the measure of minimum lot width. Prescriptions for the parking layers pertain only to the principal frontage. Prescriptions for the first layer pertain to both frontages of a corner lot. See frontage.

Private frontage: the privately held layer between the frontage line and the principal building facade.

Public frontage: the area between the curb of the vehicular lanes and the frontage line.

Rear alley (RA): a vehicular way located to the rear of lots providing access to service areas, parking, and outbuildings and containing utility easements. Rear alleys should be paved from building face to building face, with drainage by inverted crown at the center or with roll curbs at the edges.

Rear lane (RL): a vehicular way located to the rear of lots providing access to service areas, parking, and outbuildings and containing utility easements. Rear lanes may be paved lightly to driveway standards. The streetscape consists of gravel or landscaped edges, has no raised curb, and is drained by percolation.

Residential: characterizing premises available for long-term human dwelling.

Retail: characterizing premises available for the sale of merchandise and food service.

Retail frontage: Frontage designated on a land development plan and plat that requires or recommends the provision of a shopfront, encouraging the ground level to be available for retail use. See special requirements.

Road (RD): a local, rural and suburban thoroughfare of low-to-moderate vehicular speed and capacity. This type is allocated to the more rural Transect Districts (T1-T3).

Sector: a neutral term for a geographic area. In this Chapter there are six specific Sectors for regional

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planning that establish the legal boundaries for open space and development.

- 12 **Secondary frontage:** on corner lots, the private frontage that is not the principal frontage. As it affects the public realm, its first layer is regulated.

Parking occupancy rate: an accounting for parking spaces that are available to more than one use.

Shopfront: a private frontage conventional for retail use, with substantial glazing, wherein the facade is aligned close to the frontage line with the building entrance at sidewalk grade.

Special district (SD): an area that, by its intrinsic use, placement, or configuration, cannot or should not conform to one or more of the normative community unit types or Transect Districts specified by this Chapter. Special districts may be mapped and regulated at the regional scale and/or the community scale.

Special district 1 (SDB): Business: A special-use area comprised of primarily light industrial, office and warehouse buildings with some corner stores. This area allows large parking lots generally buffered from main streets. Pedestrian walkability and automobile access are balanced on a per-street basis. Open space is generally absent from this area.

Special district 2 (SDI): Industrial: A special-use area comprised of primarily heavy industrial, large federal employment complexes and warehouse buildings. This area allows truck bays, loading docks, large parking lots and rail access. Pedestrian walkability and automobile access are balanced on a per-street basis. Open space is generally absent from this area.

Special requirements: provisions for a-grid, b-grid, required retail frontage, required gallery frontage, required arcade frontage, build-to lines, coordinated frontages, terminated vistas, or cross block passages on a regulating plan or other map for those provisions.

Square: a civic space type designed for unstructured recreation and civic purposes, spatially defined by building frontages and consisting of paths, lawns and trees, formally disposed.

Stoop: a private frontage wherein the facade is aligned close to the frontage line with the first story elevated from the sidewalk for privacy, with an exterior stair and landing at the entrance.

Story: a habitable level within a building, excluding an attic or raised basement. *See Table 19.*

Street (ST): a local urban thoroughfare of low speed and capacity. *See Table 5 and Table 7.*

Streetscreen: a freestanding wall built along the frontage line, or coplanar with the facade. It may mask a parking lot from the thoroughfare, provide privacy to a side yard, and/or strengthen the spatial definition of the public realm. (Syn: streetwall.)

Substantial modification: alteration to a building that is valued at more than 50% of the replacement cost of the entire building, if new.

Swale: a low or slightly depressed natural area for drainage.

Target speed: is the velocity at which a thoroughfare tends to be driven without the constraints of signage or enforcement. There are four ranges of speed: very low: (below 20 MPH); low: (20-25 MPH); moderate: (25-35 MPH); high: (above 35 MPH). Lane width is determined by desired target speed.

Terminated vista: a location at the axial conclusion of a thoroughfare. A building located at a terminated vista designated on a regulating plan is required or recommended to be designed in response to the axis, and is frequently a vertical element.

Terrace: a private frontage type with a shallow setback and front elevated patio, usually with a low wall at the frontage line. This type buffers residential use from urban sidewalks. Terraces are also suitable for outdoor cafes. *See Table 6.*

Third Place: a term used in the concept of community building to refer to social surroundings sepa-

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rate from the two usual social environments of home and work-place. Criteria for a third place include the following: highly accessible, proximate for many within walking distance, involve regulars, and inexpensive food and drink. Coffee shops and cafes are often used as a neighborhood's third place.

Thoroughfare: a way for use by vehicular and pedestrian traffic and to provide access to lots and open spaces, consisting of vehicular lanes and the public frontage.

TOD: transit oriented development. A TOD is created by an overlay on all or part of a VIL or TCT, or by designation on a regional plan, permitting increased density to support MARC or bus rapid transit.

Town Center (TCT): a community unit type structured by a long or linear pedestrian shed that may be adjoined without buffers by one or several standard pedestrian sheds, each with the individual Transect District requirements of a TCT. A TCT takes the forms of a high-density mixed use center connected to other centers by transit. (Syn: downtown, regional center.) (Regional example: historic Charles Town, WV)

Townhouse: a single-family dwelling that shares a party wall with another of the same type and occupies the full frontage line. See rear yard building. (Syn: rowhouse)

Transect: a cross-section of the environment showing a range of different habitats. The rural-urban Transect of the human environment used in this Chapter is divided into six Transect Districts. These districts describe the physical form and character of a place, according to the density and intensity of its land use and urbanism.

Transect District: One of several areas on a zoning map regulated by this Chapter. Transect Districts are administratively similar to the land use districts in Chapter 19, except that in addition to the usual building use, density, height, and setback requirements, other elements of the intended habitat are integrated, including those of the private lot and building and public frontage.

Tree: a woody plant with an expected mature height of thirty feet or more and possessing either a single trunk or multiple trunks. Trees are often described in subcategories by common attributes and the uses they serve, such as:

i. **Ornamental Tree:** an Understory Tree planted primarily for its aesthetic value and as a landscape focal point, as opposed to its use of shading or screening even though it may perform all three uses.

ii. **Shade Tree:** typically a deciduous Tree - rarely an evergreen - planted primarily for its overhead canopy and the quality of the shade it provides.

iii. **Small/ Medium/ Large (Tree or Shrub):** a means of categorizing Trees or Shrubs based upon their canopy or spread at maturity assuming proper maintenance and normal growing conditions and which serves the purpose of allowing for their proper spacing in landscape plans.

iv. **Street Tree:** a Tree planted that is an element of a Thoroughfare assembly.

v. **Specimen Tree:** a particularly impressive or unusual example of a species due to its size, shade, age, or any other trait that epitomizes the character of the species.

vi. **Understory Tree:** a small to medium sized Tree with an expected mature height less than thirty feet and a canopy which may or may not offer a sufficient clearance height for pedestrians beneath.

Turning radius: the curved edge of a thoroughfare at an intersection, measured at the inside edge of the vehicular tracking. The smaller the turning radius, the smaller the pedestrian crossing distance and the more slowly the vehicle is forced to make the turn.

Village (VIL): a community unit type structured by a standard pedestrian shed oriented toward a common destination consisting of a mixed use center or corridor, and in the form of a medium-sized

Article 1

General

- 14 settlement near a transportation route. (Syn: traditional neighborhood development. neighborhood.)
(Regional example: historic Shepherdstown, WV)

Work-Live: a mixed use unit consisting of a commercial and residential use. It typically has a substantial commercial component that may accommodate employees and walk-in trade. The unit is intended to use predominantly as work space with incidental residential accommodations that meet basic habitability requirements. See live-work.

Yield: characterizing a thoroughfare that has two-way traffic but only one effective travel lane because of parked cars, necessitating slow movement and driver negotiation. Also, characterizing parking on such a thoroughfare.

MEMORANDUM OF UNDERSTANDING (MOU)

This Memorandum of Understanding ("MOU") is entered into this 18th day of July, 2017, by and between the City of Ranson ("City") and ROXUL USA, Inc., a Delaware Corporation ("Company"). City and Company are collectively referred to as the "Parties."

RECITALS

1. City desires to increase its employment base, economic development and related revenues for the City and promote investment on the Route 9 corridor. Company is considering constructing and operating within the City municipal limits a state-of-the-art manufacturing facility along with necessary infrastructure and improvements. The property is referenced in detail on Exhibit A, attached hereto (the "Development Property").
2. Pursuant to Ranson Municipal Code § 6-77, "the city in its sole discretion, may choose to extend a general economic development grant or loan for the benefit of a business or Company. This grant or loan is based on the availability of city funds, the economic impact, impact the development has on the community, and the extent to which the development coincides with the city development initiatives and efforts. The city council may award the grant or loan after the request has been reviewed and a subsequent recommendation is made by the city manager."
3. Upon review of Company's request and subsequent negotiations with the City Council, City Manager and his staff, the City Manager recommends the terms and conditions set forth within this MOU. After review of the terms and conditions and the City Manager's recommendation, the City Council desires to agree to a Memorandum of Understanding to provide an economic development grant to Company pursuant to Ranson Municipal Code § 6-77 as specified below.
4. City and Company agree to this MOU to publicly document the parties respective understanding of the Project and Improvements so that the public, Ranson, Company, State, Property Owner and City Consultants will share a mutual understanding of the Company's Project and economic development grants and incentives granted by Council pursuant to Ranson Municipal Code § 6-77.

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereby agree as follows:

TERMS OF MOU

1. **Description of Project and Improvements:** Company has proposed and City has agreed to consider the Project, described as follows: a new state-of-the art heavy manufacturing facility for consumer, commercial, and industrial products with a capital investment of approximately \$150 million with an estimated initial employment base of 120-140 new positions. City and Company acknowledge and agree that the final Project may be altered based on findings and assessments of City Consultants as well as additional market studies and changes to development plans by the Company.

2. **Employment:** Company anticipates the employment of approximately 120-140 full-time employees after operations begin and a significant number of temporary construction jobs. Company agrees to ensure full and equitable opportunities for qualified local residents to participate in employment opportunities that arise in the construction of the Company's project and in the operation of Company's project. Company agrees, prior to grand opening of the Project, to conduct or participate in a local job fair. The Company shall coordinate or participate in such job fair, to the extent feasible, with local and regional governmental employment agencies, local colleges and universities, and non-profit agencies so that local residents are provided with adequate notice and opportunity of employment opportunities. Company will encourage its contractors to hire local construction workers for the Project.

3. **Project Revenues:** City and Company anticipate that the Project, once approved and constructed, will generate significant revenues for the City from property taxes, business and occupation tax and fees (all tax or fee revenues generated by the Project herein referred to as the "Project Tax Revenues"). In exchange for the generation of the Project Tax Revenues as well as other public benefits to the City and its residents, including a commitment from the Company to offer employment opportunities to qualified local residents before recruiting employees from other areas, the City agrees to provide the following economic development grants to Company pursuant to Ranson Municipal Code § 6-77:
 - a. City agrees to cap all one-time City-related and imposed land development fees, building permit fees, city service fees and one-time B&O taxes on contracting pursuant to Ranson Municipal Code § 6-58 to 1% of total capital investment spent by Company within envelope of Company's property (approximately 130 acres). In consideration of the City's economic incentive package granted by this MOU, Company agrees that its total capital investment shall not be less than \$100 million. Capital investment shall include, but not be limited to: land and land preparation, building construction, process equipment and other related expenses to ensure the manufacturing facility is

operational. City shall cap all one-time fees and taxes pursuant to this paragraph at a total amount not to exceed \$1.5 million. Company shall pay half of such fee and tax to the City at the time of site plan application submittal and the remaining half at the time of the building permit application submittal.

- b. Upon certification by Company that its business activities fit within the definition of wholesaling pursuant to Ranson Municipal Code § 6-52, the Company's entire business enterprise for the purpose of ongoing business and occupation (B&O) tax filings after Company's operations begin shall be classified as wholesaling at a rate of 0.15% (fifteen one-hundredths of one percent) of gross income.
 - c. City agrees to work cooperatively with the Company, West Virginia Development Office and the Jefferson County Development Office and other agencies to secure grants and carry out their purposes; coordinate with off-site utility providers and administer contracts where necessary; and assist with the securing of other incentives from the West Virginia Development Office, the West Virginia Jobs and Infrastructure Council, and/or other state or federal agencies to promote the success of this project.
 - d. The incentives detailed in this paragraph shall be for the Company's initial Phase 1 investment described in the paragraph titled "Project Specifications" in Company's Request for Proposal dated January 9, 2017. Future expansions will be subject to the ordinances and regulations of City or to the terms of a subsequent MOU.
4. **Coordination with Overall Development:** Company affirms its intent to provide reasonable and good faith efforts to design its project and necessary infrastructure upgrades in a manner that integrates and promotes surrounding complementary development.
 5. **Groundwork Permit.** Both Parties recognize that a groundwork permit is necessary for the project timeline. City shall cooperate fully to assist the Company in accessing a groundwork permit in a timely manner so that the Company can begin earthwork and the voluntary remediation program.
 6. **Non-binding.** The Parties understand that Company is not bound to proceed with the Project, either as described in this MOU or otherwise, and that this MOU is not binding on City until approved by the Ranson City Council and signed by both Parties. While the Parties seek to define the Project for the purposes described in this MOU, the Parties understand that the Project may change as it proceeds through the public process and, based on those changes, or for any other reason, Company may decline to proceed with Project. In no case, shall this MOU be the basis for either Party to suffer any penalty as a

consequence for any decision to decline to proceed with this Project or to alter the Project from the description set forth in this MOU. Both Parties agree that material and significant alterations in the Project may require amendments to the terms set out in Paragraph 3.

7. **Compliance with Ordinances, Regulations and Special Inspections.** Nothing in this MOU relieves or excuses Company from complying with any and all applicable federal, state, county or municipal ordinance or regulation.

Company acknowledges and agrees that it will be responsible for retaining and providing third-party special inspections pursuant to Chapter 17, Section 1705 of the International Building Code adopted by City and the State of West Virginia.

8. **Miscellaneous.** This MOU shall be governed by and construed in accordance with the laws of the State of West Virginia. This MOU states the intent of each of the Parties. No legally binding obligations shall be created for either of the Parties unless and until definitive written agreements are approved by the City Council and executed by the Parties, the provisions of which will supersede this and all other understandings (written or oral) between the Parties.
9. **Expansion of Operations.** If at any time the Company anticipates a substantial expansion of its operations in the City beyond the scope currently planned for the Project, and has met or exceeded the Job Commitment and Investment Commitment described above, the City will review such any expansion plans with the intent to provide additional economic development incentives to the Company but shall not have an obligation to provide any particular incentives to the Company in respect of such expansion.
10. **Available Workforce.** The City acknowledges that the workforce available to the Company in the City and surrounding vicinity is a determinative reason for the Company's decision to locate at the Project Site. Should the Company be able to demonstrate that its ability to recruit a competitive workforce has been adversely impacted by the City providing more advantageous terms, conditions, or economic incentives than those provided to the Company within five (5) years from the execution of this MOU, then City agrees to work in good faith with Company to determine if same, or similar, terms, conditions, or economic incentives may also be available to Company.
11. **West Virginia Governmental Tort Claims and Insurance Reform Act.** Company acknowledges that any all claims that may arise against the City are governed by the West Virginia Governmental Tort Claims and Insurance Reform Act (W. Va. Code 29-12A-1 et

seq.) which sets out specific causes of action; limits the liability of political subdivisions; and, provides immunity to political subdivisions in certain instances.

- 12. Road Maintenance and Naming Rights.** The City may negotiate and agree with the State to maintain any roads built by the West Virginia Division of Highways that meet the City's design and construction specifications for the purpose of this project. The Company shall have the right to name the street providing principal access to the Facility, and any other street that both originates and terminates within the boundaries of the Project Site consistent with the provisions of Ranson Municipal Code Sec. 17-5.
- 13. Press Releases.** Neither party shall issue any press releases or make public announcements relating to this Agreement without the other party's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed; provided, however, that nothing in this Section shall impair either party's compliance with law or regulation generally or with any requirements of the Securities and Exchange Commission or of any national securities exchange or other stock market on which such party's securities are traded.
- 14. Assignment.** No party shall have the right to assign this Agreement or any portion hereof, or any of its respective rights or obligations hereunder, without the prior written consent of the other party; provided however, that the Company shall be permitted to assign this Agreement or any portion hereof, or any of its rights or obligations hereunder, to any affiliate of the Company without the prior consent of the City, however, the Company will still remain ultimately responsible and liable for the performance of any such assignee's obligations hereunder.
- 15. Contingences.** This Agreement is made expressly contingent upon the occurrence of the following conditions precedent ("Project Contingencies"), the failure of any of which will entitle Company to unilaterally terminate this Agreement without any penalty or obligation:
- a. **Site Acquisition:** Company shall close on the West Virginia Site within 120 days of fully executing this MOU ("Site Closing") and upon terms and conditions acceptable to Company, including, but not limited to, Company being able to obtain acceptable representations, warranties, covenants, indemnities, and title for the West Virginia Site and contingent upon the completion of the subdivision and rezoning of the parcel by the Company, seller, or designated third party;
 - b. **Air Permit:** Company shall obtain an appropriate air permit from the West Virginia Department of Environmental Protection no later than the second quarter of 2018.

- c. **Zoning and Land Use:** Company, seller, or designated third party, shall obtain and secure all lot changes, zoning changes, permits, including air permits, and/or any other land use approvals necessary to use and operate the Facility at the West Virginia Site in accordance with its intended plans.
- d. **Voluntary Remediation Program:** The West Virginia Site shall be eligible to participate in the West Virginia Voluntary Remediation Program (the "Remediation Program") and obtain or receive a Certificate of Completion under the Remediation Program from the West Virginia Department of Environmental Protection ("WVDEP") that provides Company acceptable immunity from liability as determined by Company in its sole discretion;
- e. **Board Approval.** Company shall obtain and secure necessary approval from its Board of Directors to make the Final Investment Decision to construct and operate the Facility at the West Virginia Site within 180 days of fully executing this MOU.
- f. **Third Party Commitments.** Company shall negotiate independent agreements and/or memorandums of understanding with the County of Jefferson and the State of West Virginia acceptable to Company prior to the Site Closing.

16. Mutual Aid Agreement for Emergency Services. The City will continue to cooperatively work with all surrounding local entities through mutual aid agreements and emergency operations plans to ensure adequate fire protection and emergency services.

17. Further Assurances. The City and Company agree to do all things and take all actions required, consistent with this Agreement, to assist in establishing the Facility and on an ongoing basis thereafter, including the obtaining, negotiation, execution and delivery of all necessary or desirable agreements, filings, consents, authorizations, approvals, licenses or deeds.

IN WITNESS WHEREOF, the Parties hereto have caused this MOU to be executed this day and year first above written.

CITY OF RANSON

By: Keith W Pierson
Keith "Duke" Pierson
Mayor

ROXUL USA Inc, a Delaware corporation

By: Trent Osilvie
Name: Trent Osilvie
Its: President

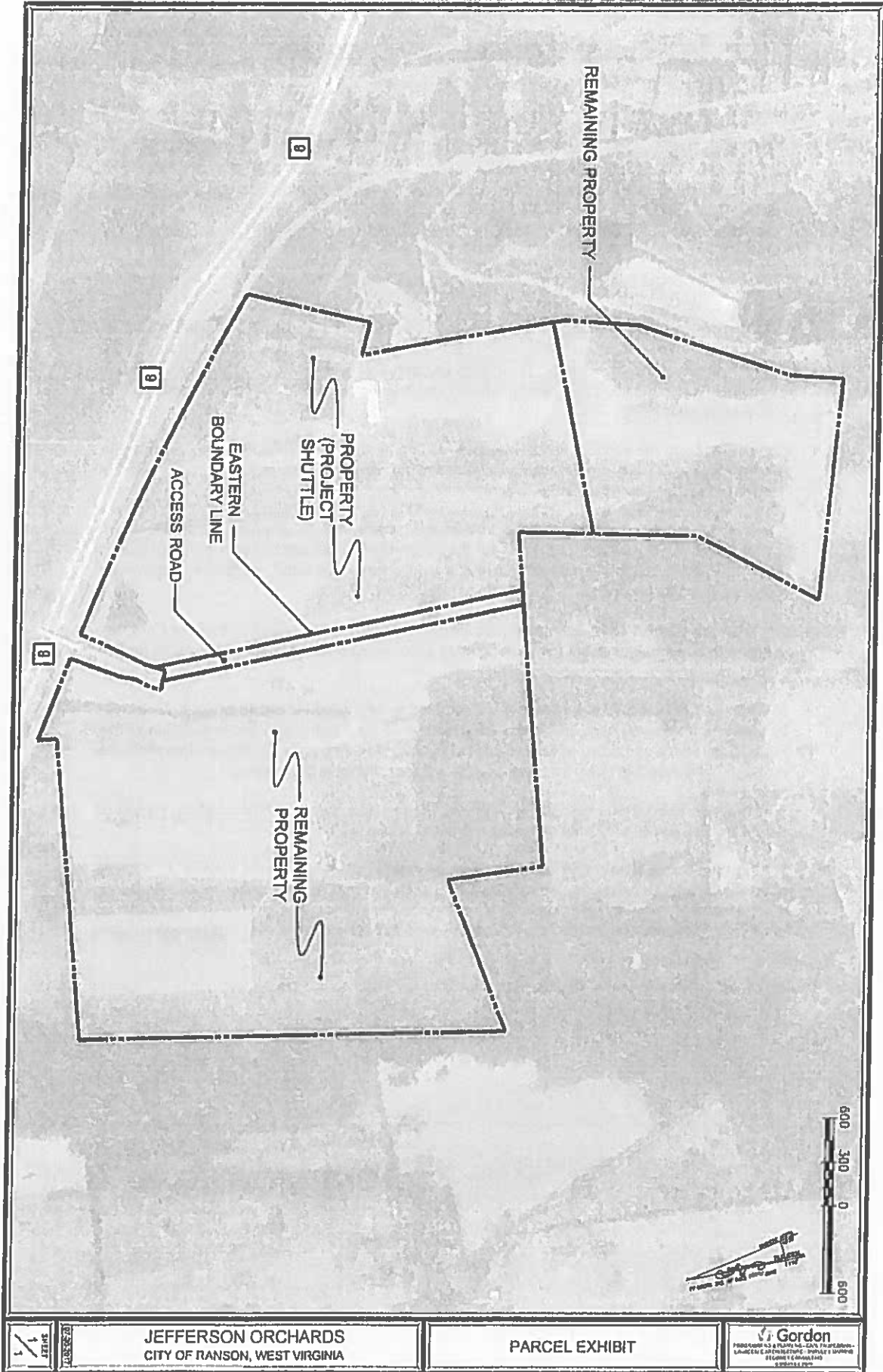
Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

EXHIBIT A

Site MAP

B000273

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1
1
DATE 06-20

JEFFERSON ORCHARDS
CITY OF RANSON, WEST VIRGINIA

PARCEL EXHIBIT

Gordon
PROFESSIONAL LANDSCAPE ARCHITECTURE, PLANNING & SURVEYING
INCORPORATED
SINCE 1954

B000274

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

TO PICK UP
JEFFERSON COUNTY DEVELOPMENT AUTHORITY

Jefferson County
Jacqueline C Shadle, Clerk
Instrument 201700016957
10/10/2017 @ 11:08:07 AM
AGREEMENT NO CHANGE
Book 1197 @ Page 106
Pages Recorded 15

PAYMENT IN LIEU OF TAXES AGREEMENT

THIS AGREEMENT is made and entered into this the 3rd day of October, 2017, by ROXUL USA Inc. (herein "Company "); THE COUNTY COMMISSION OF JEFFERSON COUNTY, West Virginia (herein the "Commission"); the BOARD OF EDUCATION OF THE COUNTY OF JEFFERSON, West Virginia (herein the "County Board"); the SHERIFF OF JEFFERSON COUNTY, WEST VIRGINIA, (herein the "Sheriff"); the ASSESSOR OF JEFFERSON COUNTY, WEST VIRGINIA, (herein the "Assessor") and the RANSON CITY COUNCIL, West Virginia, (herein City of Ranson).

RECITALS

1. Company desires to develop a heavy industrial manufacturing facility (the "Facility") on an approximately one hundred and thirty acre (130) acre parcel of land (the "Land") located in the City of Ranson, Jefferson County, West Virginia, and more particularly described in Exhibit A attached hereto and made a part hereof, which Land may be purchased by Company pursuant to a letter of intent it holds.
2. The Land and the Facility, and the cost of equipping the Facility, including the acquisition and installation of new machinery and equipment therein (the "Equipment"), are collectively referred to herein as the "Project".
3. Pursuant to this Agreement legal title in the Project will be acquired by JCDA from Company for JCDA to hold starting with the conclusion of the construction period which is expected to be three (3) years from Company's acquisition of the Land, subject to a repurchase option reserved by Company.
4. Also pursuant to this Agreement, the Project will be leased by JCDA back to Company pursuant to a Lease Agreement to be entered into upon completion of construction of the Project ("the Lease").
5. Pursuant to the Lease, Company will be required to pay, as additional advance rent, all costs in connection with the acquisition and construction of the Facility and the installation of the Equipment, which additional advance rent will be paid by Company's remittance directly to the contractors and vendors of such sums it may owe them for providing the same.
6. During the term of the Lease, JCDA will own the real and personal property which comprises the Project, subject to the Lease and other rights and interests aforesaid.
7. Pursuant to the Lease, title to any property constituting improvements, repairs, alterations, renewals, substitutions and replacements of, and additions and appurtenances to, the Project or any part thereof, when made or installed in or about the Project shall, subject to the Lease and the other rights and interests, immediately become vested in JCDA without further action on its part.

8. During the term of the Lease, JCDA's freehold interest in the real and personal property which comprise the Project, and which is covered by the Lease, will be, by law, exempt from ad valorem property taxes.

9. Company has agreed to make payments of certain amounts in lieu of ad valorem property taxes and the Commission, the County Board and City of Ranson have agreed to the acquisition, construction and equipping of the Project.

NOW, THEREFORE WITNESSETH, for and in consideration of the mutual covenants and agreements herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I
REPRESENTATIONS AND WARRANTIES, ETC.

Section 1.01. Commission Representations, Warranties, Agreements and Findings.

The Commission hereby represents, warrants, agrees, finds and confirms its findings that:

(a) The Commission is a public corporation, acting on behalf of the County of Jefferson, a political subdivision of the State of West Virginia (the "State"), validly created and existing under the Constitution and laws of the State, and is authorized and empowered by the provisions of the Constitution and laws of the State to enter into this Agreement.

(b) The Commission has found, and hereby finds, that the agreements herein contained and the consummation of the transactions in connection herewith will promote the public interest and public purposes by, among other things, providing certainty and soundness in fiscal planning and promoting the present and prospective prosperity, health, happiness, safety and general welfare of the people of Jefferson County.

(c) The execution of this Agreement and the consummation of the transactions in connection herewith and therewith, have been approved by the Commission at one or more duly called and constituted meetings, throughout which quorums of duly elected, qualified and acting members of the Commission were present and acting. The Commission's agreement to the acquisition, construction and equipping of the Project and its authorization for the execution of this Agreement are embodied in a Resolution adopted on August 3, 2017.

Section 1.02. County Board Representations, Warranties, Agreements and Findings.

The County Board hereby represents, warrants, agrees, finds and confirms its findings that:

(a) The County Board is a public corporation of the State of West Virginia and has the power and authority to enter into the transaction contemplated by this Agreement.

(b) The County Board has found, and hereby finds, that the agreements herein contained and the consummation of the transactions in connection herewith will promote the public interest and public purposes by, among other things, providing certainty and soundness in

fiscal planning and promoting the present and prospective prosperity, health, happiness, safety and general welfare of the public school students in Jefferson County.

(c) The agreement to the acquisition, construction and equipping of the Project, and the authorization for the execution of this Agreement, by the County Board are embodied in a Resolution adopted on Sept 25, 2017

Section 1.03. Sheriff Representations, Warranties, Agreements and Findings.

The Sheriff hereby represents, warrants, agrees, finds, and confirms his findings that:

(a) Pursuant to W.Va. Code §§ 11A-1-1 et. seq., he is the officer responsible for collecting ad valorem property taxes levied in Jefferson County, West Virginia, and for disbursing the payments provided for in this Agreement.

(b) The Sheriff has the power to enter into this Agreement and to carry out his obligations hereunder.

(c) To the knowledge of the Sheriff, no consent, or authorization of, or filing, registration or qualification with, any governmental or public authority on the part of the Sheriff is required as a condition precedent to the execution, delivery or performance of this Agreement by the Sheriff or as a condition precedent to the performance by the Sheriff of his duties contemplated hereby.

Section 1.04. Assessor Representations, Warranties, Agreements and Findings.

The Assessor hereby represents, warrants, agrees, finds, and confirms his findings that:

(a) Pursuant to W.Va. Code § 11-3-1 et seq., he is the officer responsible for assessing properties in Jefferson County, West Virginia, for ad valorem property tax purposes.

(b) The Assessor has the power to enter into this Agreement and to carry out his obligations hereunder.

(c) To the knowledge of the Assessor, no consent, or authorization of, or filing, registration or qualification with, any governmental or public authority on the part of the Assessor is required as a condition precedent to the execution, delivery or performance of this Agreement by the Assessor or as a condition precedent to the making of the findings by the Assessor of the matters regarding the assessment of property for taxation purposes contemplated hereby.

Section 1.05. City of Ranson Representations, Warranties and Agreements.

The City of Ranson hereby represents, warrants, agrees, finds and confirms its findings that:

(a) The City of Ranson is a public corporation, acting on behalf of the County of Jefferson, a political subdivision of the State of West Virginia (the "State"), validly created and existing

under the Constitution and laws of the State, and is authorized and empowered by the provisions of the Constitution and laws of the State to enter into this Agreement.

(b) The City of Ranson has found, and hereby finds, that the agreements herein contained and the consummation of the transactions in connection herewith will promote the public interest and public purposes by, among other things, providing certainty and soundness in fiscal planning and promoting the present and prospective prosperity, health, happiness, safety and general welfare of the people of Jefferson County.

(c) The execution of this Agreement and the consummation of the transactions in connection herewith and therewith, have been approved by the Ranson City Council at one or more duly called and constituted meetings, throughout which quorums of duly elected, qualified and acting members of the Ranson City Council were present and acting. The Ranson City Council's agreement to the acquisition, construction and equipping of the Project and its authorization for the execution of this Agreement are embodied in a Resolution adopted on July 18, 2017.

Section 1.06. Company Representations, Warranties and Agreements.

Company represents, warrants and agrees that:

(a) It is a Delaware Corporation duly organized, validly existing and in good standing under the laws of Delaware, and is duly qualified and authorized to conduct affairs or do or transact business in the State of West Virginia, with full power and legal right to enter into this Agreement and to perform its obligations hereunder.

(b) The making and performance of this Agreement and all documents, agreements and instruments in connection herewith, on Company's part, are not prohibited under and have been duly authorized in accordance with, and will not violate the terms and provisions of, Company's organizing documents, and are not prohibited by, and will not violate or conflict with or constitute a default under, any statute, order, governmental rule or regulation, agreement, instrument or document by which Company or any of its properties are bound.

ARTICLE II

AD VALOREM PROPERTY TREATMENT OF THE
PROJECT DURING THE CONSTRUCTION PERIOD
AND WHILE JCDA LEASES IT TO COMPANY

Section 2.01. JCDA's Freehold Interest in Property Comprising the Project Shall be Exempt
from Property Taxes.

During the term of the Lease, the freehold interest of JCDA, in all of the real and personal property which comprise the Project, shall not be subject to any ad valorem property taxes, the same being exempt by operation of law.

Section 2.02. Leasehold Interest Assessed and Taxed at Nominal Value.

Except as described in this Section 2.02, the leasehold interest of Company created by the Lease, and of any assignees or sub-lessees thereunder, shall be subject to assessment, and shall be entered accordingly on the property books of Jefferson County, provided however, that the assessed values of such interests shall be the nominal value of only One Dollar (\$1.00) for each such interest under the Lease or any sublease or interest thereunder, it being the understanding, agreement and finding of the parties that: (i) the rents, to be paid under the Lease by Company (which rents shall include, without limitation, sums sufficient to fully construct and equip the Facility and all costs of maintaining and insuring the Project), constitute rental payments that equal, or significantly exceed, fair market rental payments for such property during the entire term of the Lease; (ii) under the Lease, the leasehold interest of Company is not freely assignable; and (iii) the Lease does not constitute a "bargain lease" to Company which would increase any assessment of the said leasehold interest above the said nominal value.

ARTICLE III

**ACQUISITION AND CONSTRUCTION
OF THE PROJECT AND PAYMENT IN LIEU OF TAX**

Section 3.01. Acquisition, Construction and Equipping of the Facility.

The Commission, County Board, and the City of Ranson each hereby agrees to the acquisition, construction, and equipping of the Project pursuant to this Agreement, provided that Company shall be solely responsible for such acquisition, construction and equipping of the Project.

Section 3.02. Tax Exemption.

The Commission, Commission, the City of Ranson, and the County Board recognize that under West Virginia law, all real and personal property owned by JCDA which is part of the Project, is exempt from ad valorem property taxation.

Section 3.03. Payment in Lieu of Taxes.

Once actual, physical construction of the Facility is concluded and the Facility is conveyed to JCDA, Company shall make only the payments in of lieu of taxes in the amounts, if any, shown on Attachment A, PILOT Payment Schedule attached hereto and made a part hereof, during the period that this Agreement remains in effect as provided in Section 4.02 below. The amount of the payments due under this Agreement will be based on increasing percentages of estimates of the taxes that would be imposed, as if the Facility were fully taxable on its real estate (starting with 0% for the first five years), and, after the first seven years, on the ad valorem property taxes that would be imposed on the salvage value of the Equipment and any other tangible personal property situate at the Facility, the taxable value of which to be determined by multiplying the book value of the Equipment and other tangible personal property, determined according to accounting standards applied by the Company in the maintenance of its regular books of account for financial reporting purpose, by five percent (5%), and designated as

"Salvage Value," and which taxes that would be imposed thereon being hereinafter designated as "Equivalent Personal Property Tax," all as shown in Attachment A, PILOT Payment Schedule.

Company hereby agrees to make each annual payment in lieu of taxes, if and when shown to be due on Attachment A, to the Sheriff who shall distribute each such payment to the Commission, the City of Ranson and the County Board in proportion to the applicable combined levy rates (including regular and special levies, if any), for each tax year during the term of this Agreement in which such payments are made.

Section 3.04. Payment in Lieu of Tax Payable in Installments.

Company may pay each payment in lieu of tax payable under Subsection 3.03 in two equal installments per year, the first installment of which shall be paid by each March 1 and the second installment of which shall be paid by each September 1, as shown on Attachment A, or Company may pay the entire annual payment amount due in a particular calendar year on or before March 1, provided however, that the final payment in lieu of tax, shall be payable in full on or before March 1 of the year in which that payment is due.

Section 3.05. Events of Default: Remedies.

If Company shall fail to pay any payment in lieu of taxes to the Sheriff at the times and in the amounts as prescribed herein, and such failure to pay continues for a period of 30 days after written notice thereof has been sent to Company, then and in such event, the County Commission may take whatever action at law or in equity may appear necessary or desirable to enforce its rights, the rights of the County Board and the rights of the City of Ranson under this Agreement, including, without limiting the generality of the foregoing, immediately terminating this Agreement, conveying the Project to Company and causing the assessment and collection by the Assessor and Sheriff of ad valorem taxes thereon. The County Commission shall not be obligated to do any of the acts hereinabove authorized, but, in the event that the County Commission elects to do any such act, all costs and expenses incurred by the County Commission in doing any such act shall be owed by Company hereunder. No delay or omission to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time, as often as may be deemed expedient.

ARTICLE IV

GENERAL AND MISCELLANEOUS PROVISIONS

Section 4.01. Expenses and Costs.

Each party will bear its own respective legal and other costs and expenses associated with this Agreement and all documents, instruments and agreements in connection herewith, and the consummation of the transactions set forth herein and therein.

Section 4.02. Term of This Agreement.

Unless terminated sooner by the express provisions hereof, this Agreement shall remain in effect for (a) a period of nine (9) years from the date Company completes construction of the

Facility, (b) for the entire term of the Lease, and any renewals thereof, or (c) until the date that this final payment in lieu of tax is paid, in accordance with Attachment A, whichever is the shortest period of time. Until the first tax year as to which the JDCA holds title to the Facility and, then, beginning with the first tax year after to termination hereof, and as to which JCDA does not hold title to the Facility, and for each tax year thereafter, so long as Company has an interest in the Facility, it shall pay the full amount of the ad valorem property taxes on the real and personal property which comprise the Facility, as determined by applicable law, regardless of whether it held fee simple title to the Project. This provision shall survive the termination of this Agreement.

Section 4.03. Notices.

All notices to Company, the Commission, the City of Ranson, and the County Board, the Sheriff and the Assessor with respect to this Agreement, shall be deemed to be completed upon mailing by registered or certified mail, postage prepaid, addressed as follows or to such other address as shall be furnished in writing by any party to the remaining parties hereto:

- a) If to Company, as follows:
Kenneth J Cammarato
Vice President, General Counsel
ROXUL USA Inc.
4594 Cayce Rd.
Byhalia, MS 38611
- b) If to the Commission, as follows:
President, Jefferson County Commission
P. O. Box 250
Charles Town, West Virginia 25414
- c) If to the Assessor, as follows:
Assessor of Jefferson County
104 E. Washington Street
Charles Town, West Virginia 25414
- d) If to the Sheriff, as follows:
Sheriff of Jefferson County
P. O. Box 9
Charles Town, West Virginia 25414
- e) If to the County Board, as follows:
Superintendent, Jefferson County Schools
110 Mordington Avenue
Charles Town, West Virginia 25414

f) If to the City of Ranson, as follows:

Mayor, Ranson, West Virginia
312 South Mildred Street

Ranson, West Virginia 25438

Section 4.04. Credit for Payments Made.

In the event that any amounts are paid by Company, its successors or assigns, as ad valorem property taxes levied by the Commission or the County Board on their leasehold interests in the Project, such amounts shall be fully credited against and reduce the payments in lieu of taxes otherwise due pursuant to Article III herein, and Company, its successors or assigns, shall, likewise, be entitled to a refund of the same by virtue of any overpayment thereof resulting from such credit and reduction.

Section 4.05. Use of Payments in Lieu of Taxes.

Company shall not have any responsibility or liability for the application or expenditure by the Sheriff, the County Board, the City of Ranson, or by the Commission of any amount paid to the Sheriff by Company pursuant to this Agreement. The Sheriff alone shall be responsible for the proper disposition of any amount paid in lieu of tax by Company, and of any ad valorem property taxes determined to be due with respect to the Project. Subject to the Constitution and laws of the State of West Virginia, Company is hereby indemnified and held harmless, by the other parties hereto, from any lawsuit or legal action, and any liability, arising from or relating to the manner in which the Sheriff distributes or the County Board or the Commission or City of Ranson applies or expends or otherwise distributes or disposes of any such amount paid by Company under this Agreement.

Section 4.06. Construction.

It is the intention of the parties in entering into this Agreement to provide for certainty in the assessment of ad valorem property taxes with respect to the Project, to provide an inducement for Company to invest in the Project in Jefferson County, West Virginia, to clarify ambiguities as to the appropriate assessment of leasehold interests in the Project during the period it is leased by JCDA to Company, and to provide for payments in lieu of taxes as an inducement for the Commission, the County Board, the City of Ranson, the Sheriff and the Assessor to enter into this Agreement. It is the intention of the parties that this Agreement be construed liberally in order to effect the aforesaid intent of the parties.

Section 4.07. Miscellaneous.

Neither this Agreement nor any provision hereof may be amended, modified, waived, discharged or terminated orally, except by an instrument in writing signed by the parties hereto. With the written consent of the Commission, which consent shall not be unreasonably withheld or delayed, this Agreement may be assigned by Company and the provisions of this Agreement

shall be binding upon and inure to the benefit of the successors and assigns of each of the parties hereto. The captions in this Agreement are for the convenience of reference only and shall not define or limit the provisions hereof.

Section 4.08. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of West Virginia.

Section 4.09. Severability.

The parties hereby agree that in the event one or more portions of this Agreement shall be declared to be invalid by appropriate authority, the remaining provisions of this Agreement shall continue in full force and effect, provided, however, that should the aggregate ad valorem property taxes charged to Company, its successors or assigns, by the Sheriff, with respect to the Project, or the leasehold interests in it, in any one year after the tax year 2020, exceed the payments in lieu of taxes provided for in Article III herein (prior to the adjustment as provided in Section 4.04 herein), for that year, then, at the election of Company, in its sole discretion, this Agreement may be canceled and rendered void and of no further force and effect from and after the earlier of the dates on which such taxes are paid to the Sheriff or the ownership interest of JCDA is terminated.

Section 4.10. Condition to Agreement Becoming Effective.

Notwithstanding any other provision herein, this Agreement shall not become effective unless and until Company acquires the Land and title, constructs the Project and transfers ownership in and to the Project to the JCDA. In the event that Company does not acquire the Land, or construct the Project, or transfer ownership of the Project to the JCDA, it is expressly agreed that this Payment in Lieu of Taxes Agreement shall terminate and be null and void.

Section 4.11. Force Majeure

No Party shall be responsible for any delay or failure in performance of any part of this Agreement if such delay or failure is caused by fire, flood, explosion, war, act of terror, embargo, economic crisis, government requirement, civil or military authority, act of God, or other similar causes beyond its control and without the fault or negligence of the delayed or non-performing Party. The affected Party will notify the other Parties in writing within ten (10) days after the beginning of any such Force Majeure event. Notwithstanding, if a Party's performance is delayed for a period exceeding thirty (30) days from the date the other Parties receives notice under this paragraph, the non-affected Parties may, without any liability to the other Parties, terminate this agreement.

Section 4.13 Press Release

Neither party shall issue any press releases or make public announcements relating to this Agreement without the other party's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed; *provided, however*, that nothing in this Section shall impair either party's compliance with law or regulation generally or with any requirements

of the Securities and Exchange Commission or of any national securities exchange or other stock market on which such party's securities are traded.

Section 4.14. Expansion Operations.

If at any time, the Company anticipates a substantial expansion of its operations in the County beyond the scope currently planned for the Project, and has met or exceeded the Project thresholds, the County will review such any expansion plans with the intent to provide additional economic development incentives to the Company but shall not have an obligation to provide any particular incentives to the Company in respect of such expansion.

Section 4.15 Contingencies

This Agreement is made expressly contingent upon the occurrence of the following conditions precedent ("Project Contingencies"), the failure of any of which will entitle Company to unilaterally terminate this Agreement without any penalty or obligation:

- a) **Site Acquisition:** Company shall close on the Land within 180 days of fully executing this Agreement ("Site Closing) and upon terms and conditions acceptable to Company, including, but not limited to, Company being able to obtain acceptable representations, warranties, covenants, indemnities, and title for the Land and contingent upon the completion of the subdivision and rezoning of the parcel by the seller;
- b) **PSD air permit:** Company shall obtain an appropriate PSD air permit from the West Virginia Department of Environmental Protection no later than the second quarter of 2018.
- c) **Zoning and Land Use:** Company, or designated third party, shall obtain and secure all lot changes, zoning changes, permits, including PSD air permits, and/or any other land use approvals necessary to use and operate the Facility at the West Virginia Site in accordance with its intended plans.
- d) **Voluntary Remediation Program:** The Land shall be eligible to participate in the West Virginia Voluntary Remediation Program (the "Remediation Program") and obtain or receive a Certificate of Completion under the Remediation Program from the West Virginia Department of Environmental Protection ("WVDEP") that provides Roxul acceptable immunity from liability as determined by Company in its sole discretion;
- e) **Board Approval.** Company shall obtain and secure necessary approval from its Board of Directors to make the Final Investment Decision to construct and operate the Facility at the West Virginia Site within 180 days of fully executing this Agreement.
- f) **Third Party Commitments.** the Company shall negotiate independent agreements and/or memorandums of understanding with the City of Ranson and the State of West Virginia acceptable to Company prior to the Site Closing.

Section 4.16. Indemnification.

Company agrees, whether or not the transactions contemplated by this Agreement or the Lease shall be consummated, to protect, indemnify and save JCDA, the Commission, the County Board, the City of Ranson, the Sheriff and the Assessor (hereinafter individually called "Indemnified Party" and collectively called the "Indemnified Parties") harmless from and against all liability, losses, damages, costs, reasonable expenses (including reasonable counsel fees), taxes, causes of action, suits, claims, demands and judgments of any nature or form, by or on behalf of any person arising in any manner from the transactions of which this Agreement is a part or arising in any manner in connection with the Project, and, without limiting the generality of the foregoing, arising from (i) this Agreement [except the representations, warranties, and obligations expressly made and undertaken by the Indemnified Parties hereby], (ii) the design, acquisition, construction, installation, operation, use, occupancy, maintenance, ownership or leasing of the Project; (iii) any written statements or representations made or given by Company or any of its officers, employees or agents to any person, with respect to Company, the Project, and any financing therefor, including, but not limited to, statements or representations of facts, financial information or corporate affairs; (iv) damage to property or any injury to or death of any person that may be occasioned by any cause whatsoever pertaining to the Project; (v) any breach or default on the part of Company in the performance of any of its obligations under this Agreement; (vi) any violation of contract, agreement or restriction by Company relating to the Project; or (vii) any violation of law, ordinance or regulation affecting the Project or any part thereof or the ownership or occupancy or use thereof.

In the event that any action or proceeding is brought against any of the Indemnified Parties by reason of any such claim, such action or proceeding shall be defended against by counsel to such Indemnified Party or Indemnified Parties or by Company, as the Indemnified Party or Indemnified Parties, upon advice of counsel, shall determine. In the event such defense is by counsel to the Indemnified Party or Indemnified Parties, Company shall indemnify the Indemnified Party or Indemnified Parties for reasonable costs of counsel allocated to such defense and charged to the Indemnified Party or Indemnified Parties. Company, upon notice from an Indemnified Party, shall resist and defend such an action or proceeding on behalf of such Indemnified Party.

The provisions of this Section shall apply to any claim or liability not resulting from an Indemnified Party's own negligence, but shall not apply to any claim or liability resulting from an Indemnified Party's negligence, bad faith, fraud or deceit or for any claim or liability which Company was not given the opportunity to contest. The provisions of this Section 4.16 shall survive the termination of this Agreement.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have signed this Agreement as of the date first written above.

ROXUL USA Inc
By: [Signature]
Its: President

THE COUNTY COMMISSION OF
JEFFERSON COUNTY, WEST VIRGINIA
By: [Signature]
Its: President, JLL

Jacqueline C. Shadick
Clerk of the County Commission
of Jefferson County, West Virginia

CITY OF RANSON, WEST VIRGINIA
By: [Signature]
Its: Mayor

ASSESSOR OF JEFFERSON COUNTY,
WEST VIRGINIA
By: [Signature]

SHERIFF OF JEFFERSON COUNTY,
WEST VIRGINIA
By: [Signature]

THE BOARD OF EDUCATION OF
JEFFERSON COUNTY, WEST VIRGINIA
By: [Signature]
Its: President

ACKNOWLEDGMENTS

State of Mississippi
 County of DeSoto
 Signed or attested before me on 10/3/2017
 by Christina F. Swindle

 (Notary Public)
 My Commission Expires 02/08/2019



State of West Virginia
 County of Jefferson
 Signed or attested before me on August 22, 2017,
 by Peter Onoszko
Jane R. Jones

 (Notary Public)
 My Commission Expires December 16, 2023.



State of West Virginia
 County of Jefferson
 Signed or attested before me on August 25, 2017,
 by Jacqueline C. Shadle, Peter J. Dougherty,
 Keith D. Pierson and Angela L. Banks.
Jane R. Jones

 (Notary Public)
 My Commission Expires December 16, 2023.

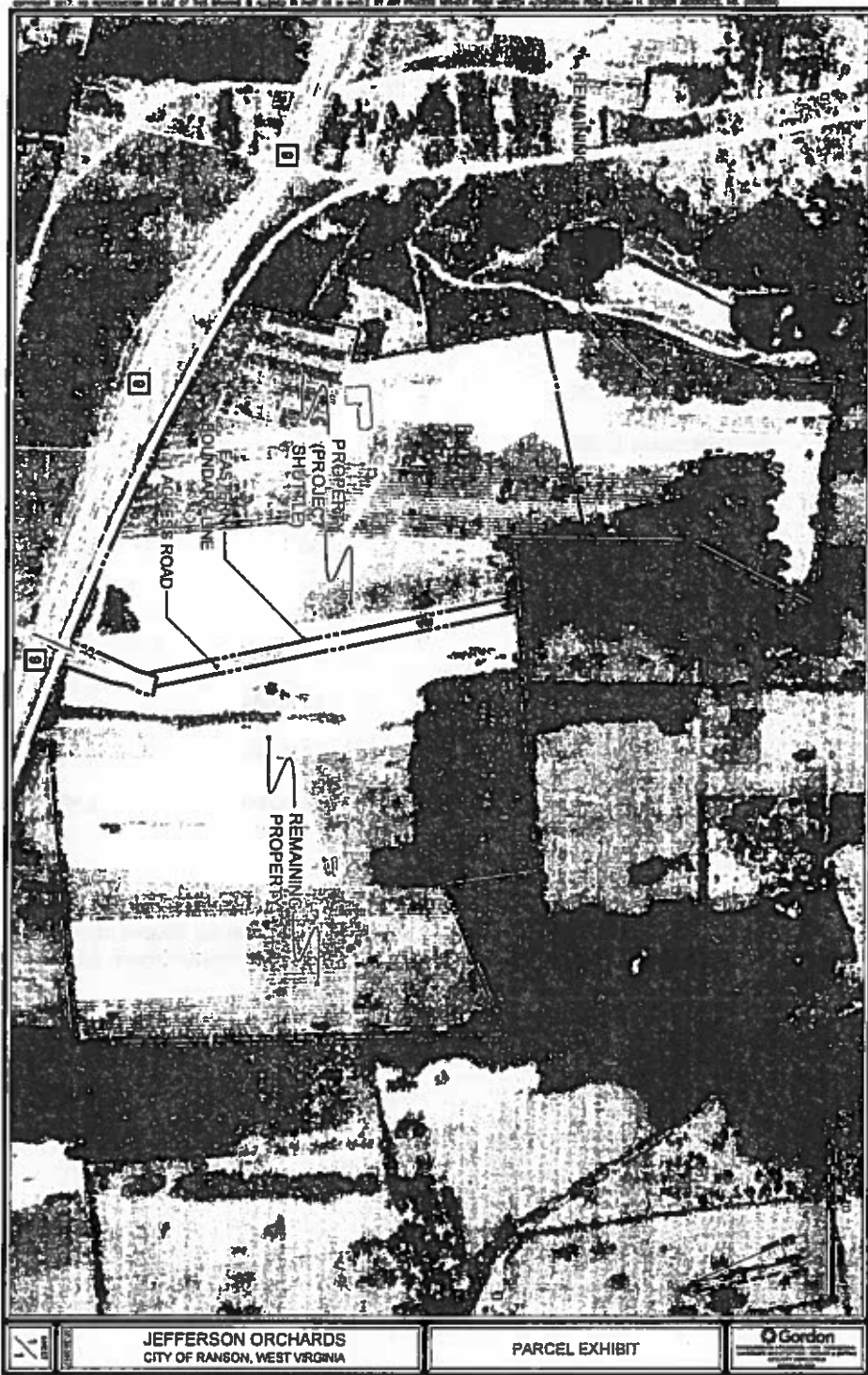


State of West Virginia
 County of Jefferson
 Signed or attested before me on Sept. 25, 2017
 by Janet L. Warner
A. Scott Sudduth

 (Notary Public)
 My Commission Expires April 4, 2020



Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)



Attachment A - PILOT Payment Schedule

<u>Payment Date</u>	<u>Real Estate</u>	<u>Personal Property</u>
September 1, 2018	N/A	N/A
September 1, 2019	N/A	N/A
September 1, 2020	\$225,000	N/A
September 1, 2021	\$0	\$0
September 1, 2022	\$0	\$0
September 1, 2023	\$0	\$0
September 1, 2024	\$0	\$0
September 1, 2025	\$0	\$0
September 1, 2026	\$90,000	\$0
September 1, 2027	\$180,000	\$0
September 1, 2028	\$725,000	EPPT**
September 1, 2029	\$815,000	EPPT**

** - Equivalent Personal Property Tax (EPPT) which shall be equal to the amount of *ad valorem* property tax chargeable against the tangible personal property of the Project were it fully taxable and appraised at salvage value based on 5% of its book value.

March 26, 2012 – Planning Commission holds public hearing for Zoning Amendment for Jefferson Orchards. Zoning to Smart Code New Community PC Resolution #12-10 sent to Council for 2 readings

March 26, 2012 – Planning Commission holds public hearing for Land Development Plan and Plat (LDPP) for Jefferson Orchards. Community Plan PC Resolution #12-13 pending zoning approval.

June 16, 2015 – North Port Station Feasibility Study

April 12, 2017 Pre-application meeting

May 1, 2017 - Staff informed the Planning Commission that a site application for Jefferson Orchards is expected.

May 21, 2017 – Thasher introduced as Rockwool's site development engineer.

May 23, 2017: City met with DOH to discuss industrial access roadway and extension of North Port Boulevard

May 26, 2017 – Pre-Application Staff Comments on LDPP and Zoning shared with Gordon

June 5, 2017 - Staff brought forth a Special District Zoning workshop to the Planning Commission for code changes

June 19, 2017 – City Receives Sufficient Jefferson Orchards LDPP and Zoning Application

June 30, 2017 – Pre-Application Site Plan submitted to the City for Rockwool

July 5, 2017 – Final MOU Sent to the City

July 5, 2017 – Press release for Rockwool

July 6, 2017 – LDPP found to be Sufficient by City

July 10, 2017 – Public Hearing for Zoning Text Changes. Andy Blake gave the Planning Commission a presentation about Roxul. The presentation included a description of the company, what they do, and the products that they make. Andy informed the Commission that at the next meeting there would be a rezoning packet and a land development plan and plat packet presented.

July 13, 2017 – Staff Report for Jefferson Orchards petition issued

August 7, 2017 – Planning Commission holds public hearing. PC Resolution #17-10 sent to Council for 2 readings

August 7, 2017 - Planning Commission is presented with the Jefferson Orchards LDPP and it is voted on and passed unanimously. PC Res-17-11- Jefferson Ochards LDPP

August 17, 2017 – Thrasher Submits Site Plan Application

August 18, 2017 First transmittal to the reviewing team

August 25, 2017 – Roxul Site Plan Sufficiency Letter Issued

September 5, 2017 1st Staff Report Issued

September 7, 2017 – Subdivision Plat Application submitted to the City

September 8, 2017 2nd Site Plan Submitted

[September 11, 2017 - Community Development update/discussion about the Roxul project](#)

September 19, 2017 – Subdivision Plat Application submitted to the City

September 26, 2017 – Staff report for Subdivision Plat Application provided to Gordon

September 27, 2017 3rd Site Plan Submitted

October 4, 2017 - Staff report for Subdivision Plat Application provided to Gordon

October 6, 2017 2nd Staff Report Issued

[October 10, 2017 – Final Plat or Recordation Transmitted to the City](#)

[October 18, 2017 The Planning Commission unanimously approved the Roxul Site Plan](#)

[PC Res- 17-13 Roxul Site Plan](#)

October 19, 2017 – City Receives DEP Issued General Permit

October 25, 2017 4th Site Plan Submitted

November 9, 2017 3rd Staff Report Issued

January 22, 2018 5th Site Plan Submittal

February 9, 2018 4th Staff Report Issued

March 3, 2018 6th Site Plan Submittal

March 21, 2018 5th Staff Report Issued

April 23, 2018 Changes to the site plan were submitted

April 27, 2018 6th Staff Report Issued approving site plan

[May 7, 2018 The Planning Commission unanimously passed the Rockwool Site Plan changes presented](#)

[PC Res-18-03 Rockwool Site Plan](#)

B015372



City Council Request For Council Action

TO: Mayor and Council

FROM: Andrew Blake, City Manager

SUBJECT: Ordinance #2017-301 - 1st READING of an Ordinance of the City Council of Ranson, West Virginia, Amending the City of Ranson Municipal Code, Chapter 19A, Article 3, Sec. 3.9 "Special Districts and Chapter 19A, Article 6, Sec. 6.1 "Special District"; and Tables 22, 23A and 23B of Chapter 19A

Per recommendation by the Ranson Community Development staff and Ranson Planning Commission approval of Resolution #2017-5 - Proposed Revisions to New Community Special District July 10, 2017, amendments to Chapter 19A - Special Districts of the Ranson Municipal Code are hereby submitted to Council for the approval of the 1st READING of Ordinance #2017-301.

Attachments:

1. 20170718 - CM - Ordinance #2017-301 - Chapter 19-A - Special Districts Amend
2. 20170718 - Special Districts Tables
3. 20170710 - PC Minutes

1. Motion to approve the 1st READING of Ordinance #2017-301
2. Second to approve the 1st READING of Ordinance #2017-301
3. Discussion
4. Vote
5. 2nd READING has been scheduled for August 1, 2017

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

ORDINANCE #2017-301

**AN ORDINANCE OF THE CITY COUNCIL OF RANSON, WEST VIRGINIA,
AMENDING THE CITY OF RANSON MUNICIPAL CODE, CHAPTER 19A,
ARTICLE 3, SEC. 3.9 "SPECIAL DISTRICTS AND CHAPTER 19A, ARTICLE
6, SEC. 6.1 "SPECIAL DISTRICT"; AND TABLES 22, 23A AND 23B OF
CHAPTER 19A**

Be it enacted and ordained by the Council of the City of Ranson that the following Chapters and Sections of the Ranson Municipal Code be amended: Chapter 19A, Article 3, Section 3.9; Chapter 19A, Article 6, Section 6.1; and Tables 22, 23A and 23B of Chapter 19A.

Section 1.

Article 3. New Community

3.9 Special Districts

- 3.9.1 Special district designations shall be assigned to areas that, by their intrinsic size, use, or configuration, cannot conform to the requirements of any Transect District or combination of districts.
- 3.9.2 Conditions of development for special districts not included in Article 6 shall be recommended by the Planning Commission and approved by the City Council and recorded in Article 6.
- 3.9.3 Special districts may be mapped within or outside of community units. If mapped within a community unit, a special district shall not exceed 20% of the net site area.
- 3.9.4 Special Districts shall conform to the heights, setbacks, and lot requirements of ~~Table 22 and Table 23~~ Article 6.1 Special Districts
- 3.9.5 Business Special District (SDB)
- a. SDB is available for industrial and manufacturing areas and areas with a high concentration of office and light industrial uses.
 - b. SDB is limited to: ~~a maximum size of 120 acres.~~
 - i. a maximum of 120 acres
 - ii. a minimum of 2 acres within a Community Unit Type
 - iii. a minimum of 10 acres outside a Community Unit Type
 - c. SDB ~~may~~ shall be mapped within or adjacent to village and town center community units.
 - d. SDB should be mapped within or adjacent to a TOD overlay district.
- 3.9.6 Industrial Special District (SDI)
- a. SDI is available for industrial and manufacturing areas.
 - b. SDI is limited to: ~~a maximum size of 200 acres.~~
 - i. a maximum of 200 acres
 - ii. a minimum of 4 acres within a Community Unit Type
 - iii. a minimum of 15 acres outside a Community Unit Type
 - c. SDI may be mapped adjacent to village and town center community units.
 - d. SDI should be mapped within or adjacent to a TOD overlay district.

Article 6. Special District

6.1 Special Districts ~~SDB and SDI~~

6.1.1 Building Placement

- a. Newly platted lots shall be dimensioned according to Sec 3.5.1, Sec 3.6, Table 22, and Table 23.
- b. Buildings shall be placed in relation to the boundaries of their lots according to Table 22 and Table 23.
- c. ~~One principal building at the frontage, and one outbuilding to the rear of the principal building, may be built on each lot as shown in Table 15.~~
- d. Lot coverage by building shall not exceed that recorded in Table 22 and Table 23.
- e. Setbacks for buildings shall be as shown in Table 22 and Table 23.

6.1.2 Building Configuration

a. General to SDB, SDI Special Districts (SD)

- i. ~~Buildings on corner lots shall have two private frontages as shown in Table 17. Prescriptions for the second and third layers pertain only to the principal frontage. Prescriptions for the first layer pertain to both frontages. Building heights, setbacks, and expression lines shall conform to Table 5, and be allocated as required in Table 22, Table 23 A, and Table 23 B.~~
- ii. ~~Encroachments shall be as follows: At the first layer, cantilevered awnings and entry canopies may encroach up to one hundred percent (100%) of the depth of the setback, except as may be further allowed by Chapter 19 of the City of Ranson Code of Ordinances; cantilevered portions of balconies, bay windows, and roofs shall be a maximum three (3) feet deep and may encroach up to a three (3) feet depth of the setback. Other cantilevered portions of the building shall maintain the required setback. At the second layer no encroachments are permitted except that façade components promoting energy efficiency such as shading and screening devices that are non accessible may encroach a maximum of three (3) feet. The private frontage of buildings shall conform to and be allocated in accordance with Table 6.~~
- iii. ~~Galleries and arcades shall be a minimum twelve (12) feet deep and may encroach up to one hundred percent (100%) of the depth of the setback. Reserved~~
- iv. In a parking structure or garage, each above-ground level counts as a single story regardless of its relationship to habitable stories.
- v. Height limits do not apply to attics or raised basements, masts, belfries, clock towers, chimney flues, water tanks, or elevator bulkheads, or stacks.
- vi. ~~All storage, utility and infrastructure elements including service areas, loading space, transformers, telephone boxes, garbage cans, dumpsters, condensers, meters, backflow preventers, siamese connections and the like shall be located within the second or third layer and concealed from view from any frontage or sidewalk by streetscreens, and opaque gates. Loading and service entries shall be accessed from alleys when available.~~
- vii. ~~Building heights shall be measured in stories and shall conform to Table 5 and be allocated as required in Table 22 and Table 23. Industrial uses requiring~~

~~additional Height in SDI may be permitted by administrative waiver. The City Manager or his designee must make the following written findings:~~

- ~~1. The waiver is consistent with the provisions of Section 1.2 Intent.~~
 - ~~2. The waiver is consistent with the Comprehensive Plan.~~
 - ~~3. The waiver does not require a Special Exception Permit.~~
 - ~~4. The additional height will not materially endanger the public health or safety or constitute a public nuisance if located where proposed and developed according to the plans and information submitted and approved.~~
 - ~~5. The additional height will not substantially injure the value of adjoining property; or that the use is a public necessity.~~
 - ~~6. The additional height, if developed according to the plans and information approved, will be in harmony with proximate land uses, and consistent with the purposes of the district.~~
 - ~~7. The applicant has demonstrated that the use specifically requires the proposed Height.~~
- viii. ~~A first floor commercial use, which shall be a minimum of 11 feet with a maximum of 25 feet. A single floor level exceeding 14 feet, or 25 feet at ground level, shall be counted as two (2) stories. Mezzanines extending beyond 33% of the floor area shall be counted as an additional story.~~
- ix. ~~Flat roofs shall be enclosed by parapets of a minimum height required to conceal mechanical equipment.~~
- x. ~~Streetscreens shall be between three and a half (3.5) and eight (8) feet in Height. The Streetscreen may be replaced by a hedge or fence. Streetscreens shall have openings no larger than necessary to allow automobile and pedestrian access.~~
- b. Specific to Special District Business (SDB)
- i. The private frontage of buildings shall conform to Table 6. Buildings on corner lots shall have two private frontages as shown in Table 17. Prescriptions for the second and third layers pertain only to the principal frontage. Prescriptions for the first layer pertain to both frontages.
 - ii. All facades shall be glazed with clear glass no less than 15% of the first story. A first floor commercial use, which shall be a minimum of 11 feet with a maximum of 25 feet. A single floor level exceeding 14 feet, or 25 feet at ground level, shall be counted as two (2) stories. Mezzanines extending beyond 33% of the floor area shall be counted as an additional story
 - iii. A first level lodging use shall be raised a minimum of 1.5 feet from average sidewalk grade.
 - iv. All facades shall be glazed with clear glass no less than 15% of the first story.
 - vi. All storage, utility and infrastructure elements including service areas, loading space, transformers, telephone boxes, garbage cans, dumpsters, condensers, meters, backflow preventers, siamese connections and the like shall be located within the second or third layer and concealed from view from any frontage or sidewalk by streetscreens, and opaque gates.
 - vii. Loading and service entries shall be accessed from alleys when available.

viii. Encroachments in to the Front and Side Setbacks shall be as follows:

1. At the first layer, cantilevered awnings and entry canopies may encroach up to one hundred percent (100%) of the depth of the setback.
2. Cantilevered portions of balconies, bay windows, and roofs shall be a maximum three (3) feet deep and may encroach up to a three (3) feet depth of the setback. Other cantilevered portions of the building shall maintain the required setback.
3. At the second layer no encroachments are permitted except that facade components promoting energy efficiency such as shading and screening devices that are non-accessible may encroach a maximum of three (3) feet.

ix. Galleries and arcades

1. Shall be a minimum twelve (12) feet deep
2. May encroach up to one hundred percent (100%) of the depth of the front setback.

x. Flat roofs shall be enclosed by parapets of a minimum height required to conceal mechanical equipment.

c. Specific to SDI-Reserved

- i. ~~Vehicular entries, loading space and service areas shall be permitted on principal frontages.~~

d. Specific to SDI inside a Community Unit Type

- i. Buildings on corner lots shall have two private frontages as shown in Table 17. Prescriptions for the second and third layers pertain only to the principal frontage. Prescriptions for the first layer pertain to both frontages.
- ii. All facades shall be glazed with clear glass no less than 15% of the first story adjacent to primary frontages.
- vi. All storage, utility and infrastructure elements including service areas, loading space, transformers, telephone boxes, garbage cans, dumpsters, condensers, meters, backflow preventers, siamese connections and the like shall be located within the second or third layer and concealed from view from any frontage or sidewalk by streetscreens, and opaque gates.

vii. Loading and service entries shall be accessed from alleys when available.

viii. Encroachments in to the Front and Side Setbacks shall be as follows:

4. At the first layer, cantilevered awnings and entry canopies may encroach up to one hundred percent (100%) of the depth of the setback.
5. Cantilevered portions of balconies, bay windows, and roofs shall be a maximum three (3) feet deep and may encroach up to a three (3) feet depth of the setback. Other cantilevered portions of the building shall maintain the required setback.
6. At the second layer no encroachments are permitted except that facade components promoting energy efficiency such as shading and screening devices that are non-accessible may encroach a maximum of three (3) feet.

ix. Galleries and arcades

3. Shall be a minimum twelve (12) feet deep
4. May encroach up to one hundred percent (100%) of the depth of the front

setback.

- x. Flat roofs shall be enclosed by parapets of a minimum height required to conceal mechanical equipment.
- e. Specific to SDI outside a Community Unit Type
 - i. The private frontage of buildings shall conform to Common Lawn as shown in Table 6.
 - ii. Loading and service entries shall be limited to access from internal driveways or internal private streets.
 - iii. Height
 - 1. Maximum height shall be 125'.
 - 2. Deviations may be requested through administrative wavier to exceed maximum height (See Chapter 19A, 1.5.3 Administrative Waivers)
 - iv. Lighting internal to the district shall follow the following lighting requirements
 - 1. The style of the light and light standard shall be consistent with the architectural style of the principal building.
 - 2. The maximum height of on-site freestanding lights shall not exceed 40 feet.
 - 3. All outdoor lighting shall be downward directed and shielded so as to prevent other parcels from being directly illuminated.
 - 4. Where outdoor lighting is provided the maximum incidental light spillage onto adjacent non-SDI parcels shall be 0.2 footcandles as measured at eight feet above average grade at the property line of the receiving parcel.

6.1.3 Building Use

- a. Buildings in Special Districts shall conform to the uses and intensities described in Table 7 and Table 8.
- b. Conditional uses, refer to procedure in Article 5.7.1

6.1.4 Parking Standards

- a. Vehicular parking shall be required as shown in Chapter 19, Sec. 19-12.
- b. On-street parking available along the frontage lines that correspond to each lot shall be counted toward the parking requirement of the building on the lot.
- c. All parking, including open parking areas, covered parking, garages, loading docks and service areas shall be masked from the frontage by a streetscreen or landscape buffer, pursuant to Subsection 6.1.2. Underground parking may extend into the second layer only if it is fully underground and does not require raising the first floor elevation of the second layer above that of the sidewalk.
- d. Buildings mixing uses shall provide parking required for each use.
- e. Parking shall be internally accessed by private driveways such as rear alleys or rear lanes, when such are available.
- f. For Special Districts that are outside a Community Unit Type, open parking areas may be allowed unmasked on the frontage if
 - i. perimeter landscaping and screening is provided
 - ii. Through an administrative waiver as described in Section 1.5.

6.1.5 Landscape Standards

- a. Buffers and screening elements shall be used to screen parking areas from public

view, to screen service yards and other places that are unsightly, and to buffer between the special district and an adjacent Transect District.

- i. A frontage landscape buffer, which may also include the sidewalk, shall be a minimum of ten (10) feet in depth, measured from the frontage line and running its full width.
 1. A minimum of one (1) tree shall be planted within the first layer for every 700 square feet of frontage landscape buffer.
 2. Fifty (50) percent or more of the frontage landscape buffer must have shrubs and vegetative cover.
- ii. An interior landscape buffer located along common property lines shall be required between a SD and an adjacent Transect Districts.
 1. A minimum of one (1) tree shall be planted within the side and rear setbacks for every 700 square feet of interior landscape buffer.
 2. Fifty (50) percent of the interior landscape buffer shall be covered with vegetation.

6.1.6 Signage Standards Specific to Special Districts

a. The following signs are permitted from Article 5.11 Signage Standards:

- i. Address Sign
- ii. Awning Sign
- iii. Band Sign
- iv. Monument – per entrance
- v. Nameplate Sign

b. The following sign is also permitted from 19-15(f)(1) Wall Signs

Section 2.

Tables 22, 23A and 23B are hereby amended as attached.

Section 3. (Uncodified in published ordinances).

- (a) Savings Clause. The provisions of this Ordinance are hereby declared to be severable, and if any clause, sentence, word, section or provision is declared void or unenforceable for any reasons by any court of competent jurisdiction, such declaration shall not affect any portion of the Ordinance other than said part or portion thereof.
- (b) Repeal. All ordinances in conflict with this Ordinance are hereby repealed.
- (c) Effective Date. This Ordinance shall become effective immediately upon adoption.

Strike-throughs indicate language that would be stricken from the present law, and underscoring indicates new language that would be added.

Adopted by the City Council of the City of Ranson after a 1st reading on _____, 2017 and a 2nd reading on _____, 2017 by a vote of _____ in the affirmative, _____ in the negative with _____ abstentions.

Keith D. Pierson
Mayor

ATTEST:

Stacey A. Dodson Pfaltzgraff
City Clerk

AFFIX CITY SEAL

Attachment: 20170748 - CM - Ordinance #2017-301 - Chapter 10.A - Special Districts Amend (1162 - Ordinance #2017-301)
Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

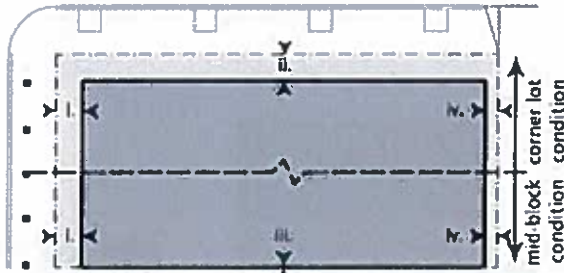
Article 6

Special Districts

74

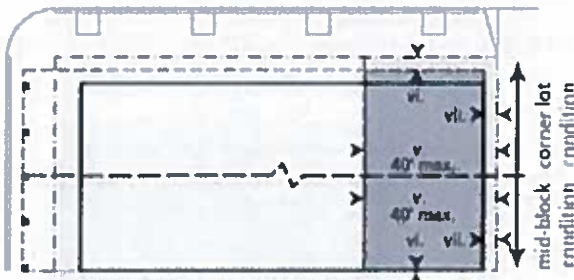
TABLE 22. SDB STANDARDS

A. BUILDING PLACEMENT
PRINCIPAL BUILDING



- i. Front Setback (Principal) 24 ft. max.
- ii. Front Setback (Secondary) 24 ft. max.
- iii. Side Setback 24 ft. max.
- iv. Rear Setback 12 ft. min.

OUTBUILDING

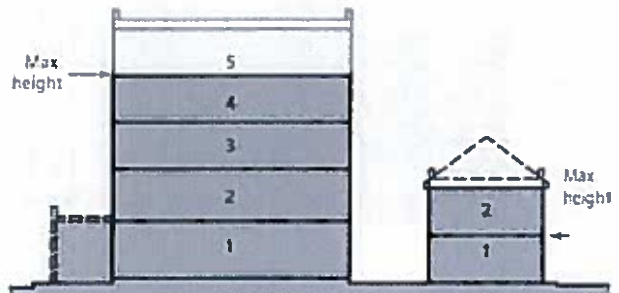


- v. Front Setback (Principal) 40 ft. max. from rear property line
- vi. Side Setback 3 ft. min.
- vii. Rear Setback 3 ft. min.

ENCROACHMENTS

- i. Setback Encroachments
 - Stoop, Lightwell or Terrace 100% max.
- ii. Sidewalk Encroachments
 - Awning or Gallery 80% max.
- iii. Encroachment Depths
 - Stoop, Lightwell or Terrace 6 ft. max.
 - Gallery within 2 ft. of curb
 - Awning within 2 ft. of curb

B. BUILDING FORM
HEIGHT



PRINCIPAL BUILDING

- Stories 4 max., 5 by special exception
- To Eave / Parapet 70 ft. max., 90 ft. by special exception

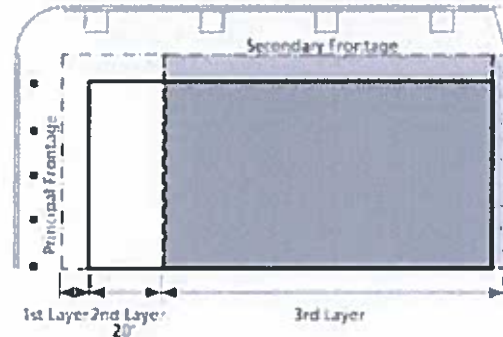
OUTBUILDING BUILDING

- Stories 2
- To Eave / Parapet 30 ft. max.

MASS

- Lot Width 60 ft. min., 300 ft. max.
- Lot Coverage 70% max.
- Facade Buildout at Setback 60% min. - 100% max.

PARKING AND STORAGE LOCATION



PARKING

- 1st layer (see Table 15) not permitted
- 2nd layer (see Table 15) permitted
- 3rd layer (see Table 15) permitted

TRASH & STORAGE * LOCATION

- 1st layer (see Table 15) not permitted
- 2nd layer (see Table 15) not permitted
- 3rd layer (see Table 15) permitted

* Storage includes boats and recreational vehicles.

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

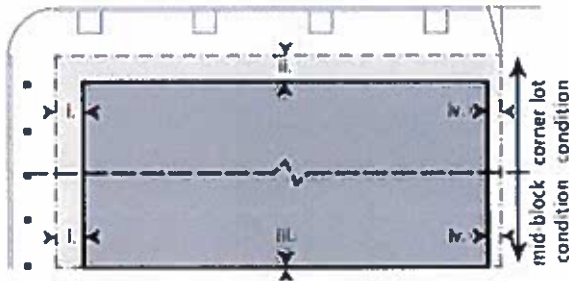
Article 6

Special Districts

TABLE 23.A SDI STANDARDS

A. BUILDING PLACEMENT

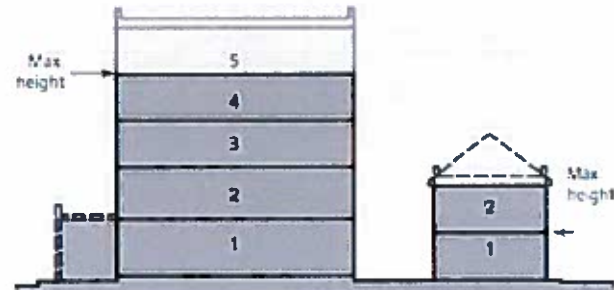
PRINCIPAL BUILDING



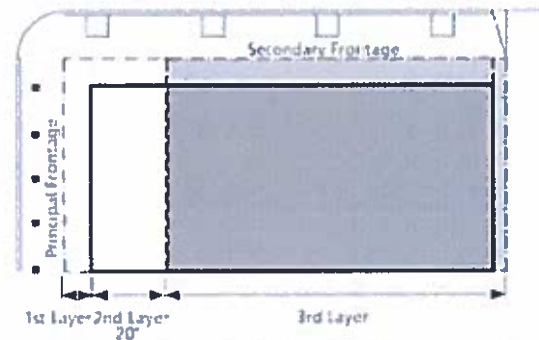
i. Front Setback (Principal)	30 ft. max.
ii. Front Setback (Secondary)	30 ft. max.
iii. Side Setback	24 ft. max.
iv. Rear Setback	24 ft. min.
ENCROACHMENTS	
i. Setback Encroachments	
Stoop, Lightwell or Terrace	100% max.
ii. Sidewalk Encroachments	
Awning or Gallery	80% max.
iii. Encroachment Depths	
Balcony and / or Bay Window	6 ft. max.
Stoop, Lightwell or Terrace	6 ft. max.
Gallery	within 2 ft. of curb
Awning	within 2 ft. of curb

B. BUILDING FORM

HEIGHT



PRINCIPAL BUILDING	
Stories	4 max., 5 by special exception
To Eave / Parapet	70 ft. max, 90 ft. by special exception
MASS	
Lot Width	n/a
Lot Coverage	60% max.
Facade Buildout at Setback	n/a
PARKING AND STORAGE LOCATION	



PARKING	
1st layer (see Table 15)	permitted
2nd layer (see Table 15)	permitted
3rd layer (see Table 15)	permitted
TRASH & STORAGE * LOCATION	
1st layer (see Table 15)	not permitted
2nd layer (see Table 15)	not permitted
3rd layer (see Table 15)	permitted

* Storage includes boats and recreational vehicles.

Attachment: 20170718 - Special Districts Tables 1442 - Ordinance #2017-2011
Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

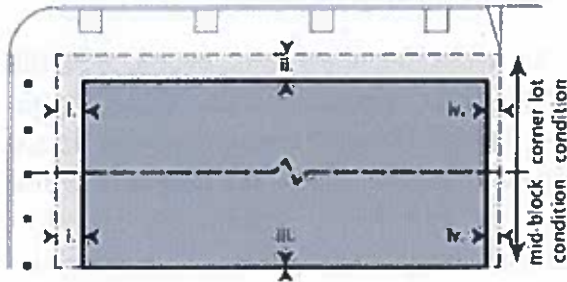
Article 6

Special Districts

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TABLE 23.B SDI STANDARDS

A. BUILDING PLACEMENT
PRINCIPAL BUILDING

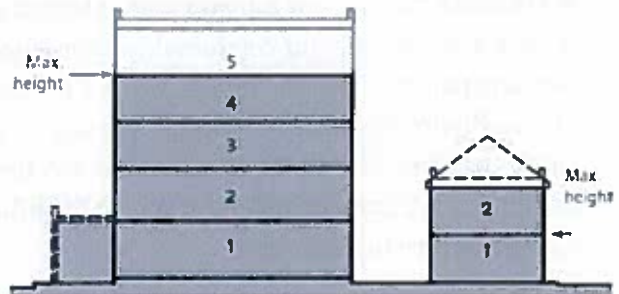


- i. Front Setback (Principal) **30 ft. min.**
- ii. Front Setback (Secondary) **30 ft. min.**
- iii. Side Setback **24 ft. min.**
- iv. Rear Setback **24 ft. min.**

ENCROACHMENTS

- i. Setback Encroachments
 - Stoop, Lightwell or Terrace **n/a**
- ii. Sidewalk Encroachments
 - Awning or Gallery **n/a**
- iii. Encroachment Depths
 - Balcony and / or Bay Window **n/a**
 - Stoop, Lightwell or Terrace **n/a**
 - Gallery **n/a**
 - Awning **n/a**

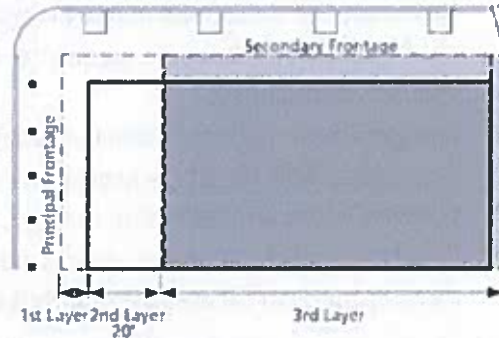
B. BUILDING FORM
HEIGHT



PRINCIPAL BUILDING

- Stories **n/a**
 - To Eave / Parapet **125 ft. or through administrative waiver**
- MASS**
- Lot Width **n/a**
 - Lot Coverage **60% max.**
 - Facade Buildout at Setback **n/a**

PARKING AND STORAGE LOCATION



PARKING

- 1st layer (see Table 15) **permitted**
- 2nd layer (see Table 15) **permitted**
- 3rd layer (see Table 15) **permitted**

TRASH & STORAGE * LOCATION

- 1st layer (see Table 15) **permitted**
- 2nd layer (see Table 15) **permitted**
- 3rd layer (see Table 15) **permitted**

* Storage includes boats and recreational vehicles.

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Resolution #2015-22

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANSON ADOPTING AND APPROVING THE NORTHPORT STATION FEASIBILITY STUDY AND MEMORANDUM OF UNDERSTANDING WITH JEFFERSON ORCHARDS, INC..

WHEREAS, the City of Ranson was selected in October 2010 and awarded over \$1,000,000 by the Partnership for Sustainable Communities which is comprised of the United States Department of Transportation, United States Housing and Urban Development and United States Environmental Protection Agency to serve as a national model for how small rural cities on the fringe of a major metropolitan area can foster sustainable economic development, transit, and community livability through targeted and strategic planning and infrastructure investments;

WHEREAS, the planning funds were used for the following linked and interdependent project components:

- Draft the 2012 Comprehensive Plan.
- Develop a new zoning ordinance for downtown, as well as undeveloped, outlying areas of the City of Ranson;
- Redesign the Fairfax Boulevard-George Street Corridor into a "complete street" with green infrastructure, to promote a better transportation route for pedestrians, cyclists, and transit;
- Design a new regional Charles Washington Commuter Center in downtown Charles Town that will facilitate access to regional rail and bus transit systems for Ranson, Charles Town and Jefferson County; and
- Create a master plan for downtown Ranson that spurs job growth and economic development in former dilapidated manufacturing sites;

WHEREAS, within the 2012 Ranson Comprehensive Plan, the Jefferson Orchards property is highlighted as one of the major development projects within the region and was selected by the Ranson City Council and Ranson Planning Commission as a property to demonstrate "SmartCode" regulations to promote traditional-neighborhood, mixed-use, and green focused development. The approved plan allows for a Village, Town Center or Transit Oriented Development. Within the Comprehensive Plan, the proposed relocation of the Duffields MARC Stop to Jefferson Orchards is supported;

WHEREAS, the City of Ranson and Hagerstown-Eastern Panhandle MPO has committed significant resources for the proposed relocation of the Duffields MARC stop to the Jefferson Orchards site. The West Virginia State Rail Authority adopted a unanimous resolution supporting the relocation and signed an agreement with MARC and CSX to relocate the MARC stop at Duffields to NorthPort;

WHEREAS, the Hagerstown-Eastern Panhandle Metropolitan Transit Authority funded a Feasibility Study to conduct a site assessment to identify key physical constraints that could affect the location of the Northport Station and design criteria for the station and its parking facilities;

WHEREAS, the Hagerstown-Eastern Panhandle MPO and its consultants have presented the final study to Ranson City Council;

WHEREAS, Jefferson Orchards, Inc. and the City of Ranson desire to enter into a Memorandum of Understanding concerning the implementation of the "Northport Station" project to establish a multi-modal transportation station on the Jefferson Orchards property that is consistent with the plan for future development of that property.

WHEREFORE, the Ranson City Council resolves as follows:

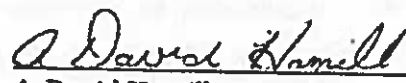
Section 1. The Ranson City Council hereby adopts and supports the Northport Feasibility Study, a copy which is attached to this Resolution and incorporated as fully set forth herein.

Section 2. The Mayor is hereby authorized to execute the Memorandum of Understanding with Jefferson Orchards, Inc., a copy of which is attached to this resolution and incorporated as fully set forth herein.


Section 3. The City Clerk is hereby directed to forward a copy of this executed Resolution and Memorandum of Understanding to the Hagerstown-Eastern Panhandle MPO and Jefferson Orchards, Inc.

Dated this 7th day of July 2015.

Approved by:


A. David Hamill
Mayor

Attested by:


Stacey A. Dodson Pfaltzgraff
City Clerk



RESOLUTION OF THE EASTERN PANHANDLE TRANSIT AUTHORITY ADOPTING AND APPROVING THE NORTHPORT STATION FEASIBILITY STUDY AND MEMORANDUM OF UNDERSTANDING WITH THE CITY OF RANSON

RESOLUTION – 1-15

WHEREAS, on May 18, 2015, the Eastern Panhandle Transit Authority (EPTA) was presented with a proposal to support and approve the Northport Station Feasibility Study and Memorandum of Understanding with the City of Ranson. The presentation, provided by Mr. Matt Mullenax of the Hagerstown Eastern Panhandle Metropolitan Planning Organization (MPO) and Mr. Matt Ward, Consultant for Sustainable Strategies, representing the City of Ranson;

WHEREAS, the City of Ranson was selected in October 2010 and awarded over \$1,000,000 by the Partnership for Sustainable Communities which is comprised of the United States Department of Transportation, United States Housing and Urban Development and United States Environmental Protection Agency to serve as a national model for how small rural cities on the fringe of a major metropolitan area can foster sustainable economic development, transit, and community livability through targeted and strategic planning and infrastructure investments;

WHEREAS, within the 2012 Ranson Comprehensive Plan, the Jefferson Orchards property is highlighted as one of the major development projects within the region and was selected by the Ranson City Council and Ranson Planning Commission as a property to demonstrate "SmartCode" regulations to promote traditional-neighborhood, mixed-use, and green focused development. The approved plan allows for a Village, Town Center, or Transit Oriented Development. Within the Comprehensive Plan, the proposed relocation of the Duffields MARC Stop to Jefferson Orchards is supported;

WHEREAS, the City of Ranson and Hagerstown-Eastern Panhandle MPO has committed significant resources for the proposed relocation of the Duffields MARC stop to the Jefferson Orchards site. The West Virginia State Rail Authority adopted a unanimous resolution supporting the relocation and signed an agreement with MARC and CSX to relocate the MARC stop at Duffields to Northport;

WHEREAS, the Hagerstown Eastern Panhandle MPO funded a Feasibility Study to conduct a site assessment to identify key physical constraints that could affect the location of the Northport Station and design criteria for the station and its parking facilities;

WHEREAS, the Hagerstown-Eastern Panhandle MPO and its consultants have presented the final study to Ranson City Council;

WHEREAS, the City of Ranson and Eastern Panhandle Transit Authority desire to enter into a Memorandum of Understanding concerning the implementation of the "Northport Station" project to establish a multi-modal transportation station on the Jefferson Orchards property.

WHEREAS, the "Northport Station" project is consistent with the Hagerstown-Eastern Panhandle MPO Long-Range Plan, Direction 2040, as well as, the Eastern Panhandle Transit Authority 2015 Transit Development Plan.

WHEREFORE, the Eastern Panhandle Transit Authority resolves as follows:

Section 1. The Eastern Panhandle Transit Authority hereby adopts and supports the Northport Feasibility Study, a copy which is attached to this Resolution and incorporated as fully set forth herein.

Section 2. The EPTA Board President is hereby authorized to create and execute the Memorandum of Understanding with the City of Ranson.

Section 3. The EPTA Executive Director is hereby directed to forward a copy of this executed Resolution and Memorandum of Understanding to the Hagerstown-Eastern Panhandle MPO and the City of Ranson upon completion.

Dated this 20th day of July 2015.

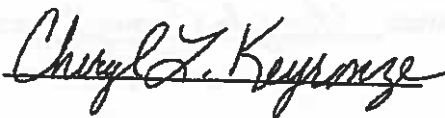
Approved by:



Nic Diehl

Board President

Attested by:



Cheryl L. Keyrouze

Executive Director



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

State Rail Authority

120 Water Plant Drive, Moorefield, West Virginia 26836
(304) 538-2305 • TDD: (800) 742-6991 • FAX: (304) 538-7474

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Cabinet Secretary

Resolution of the West Virginia State Rail Authority

At a meeting of the Board of Directors of the West Virginia State Rail Authority duly called and held on the 24th day of January 2013, a quorum being present, the following was adopted:

Whereas, the Board of Directors was asked to support a resolution to allow its Executive Director to discuss with MARC the possibility of the re-location of the Duffields train station.

Whereupon, on motion it was voted on and approved that:

The Executive Director, on behalf of the State Rail Authority, has the authority to enter into discussions with the Maryland's MARC train service (MARC) regarding the re-location of the Duffields MARC train stop to a future new train station at the "NorthPort" development in the City of Ranson, WV.

I, Max Scott, Secretary of the Board of Directors of the West Virginia State Rail Authority, do hereby certify that the foregoing action of the Board of Directors was properly voted upon and adopted at a meeting duly called and held on January 24, 2013, that such action of the board has not been repealed, revoked, rescinded or amended, and is in full force and effect as of the date hereof, and that such resolution does not conflict with any charter or by-law provision of the corporation.

The State Rail Authority

By: Max G. Scott
Secretary
Board of Directors

Date: 1/30/13

Attest: Angela Lynn Myers

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

West Virginia State Rail Authority

January 24th, 2013

RESOLUTION

The Board of Directors of the West Virginia Rail Authority, in light of increased demand for passenger rail transportation and the need for improved access and safety for its citizens, gives its Director Cindy Butler the authority to enter into discussions with the Maryland's MARC train service (MARC) regarding the re-location of the Duffields MARC train stop to a future new train station at the "NorthPort" development in the City of Ranson, West Virginia (Ranson).

Whereas, the West Virginia Rail Authority is underway with comprehensive studies to determine how to maximize the use of passenger rail and MARC rail opportunities in the state; and

Whereas, population growth in Jefferson County and the WV Eastern Panhandle is significantly increasing; and

Whereas, MARC Rail service in the WV Eastern Panhandle is already a generator of economic opportunity and a solution to traffic congestion and other road-related transportation challenges; and

Whereas, the demand for passenger rail transportation to the Maryland and Washington, DC job markets is increasing; and

Whereas, the West Virginia Rail Authority is the contracted partner of MARC for the use and upkeep of the Duffields, WV train stop; and

Whereas, the Duffields stop's geographic location and at-grade positioning creates significant safety and access concerns for riders; and

Whereas, the City of Ranson has zoned property at the current Jefferson Orchards location for the creation of an improved train station and transit-oriented development; and

Whereas, Ranson, the property owners, the WV congressional delegation, the WV state representatives in this community, WV MARC riders, and the general public support the development of the Northport MARC train station project; and

Whereas, the West Virginia Rail Authority would not significantly increase its current responsibilities at the new station;

Now, Therefore,

Be It Resolved that the West Virginia Rail Authority, as the contracted partner with MARC, has the authority to enter into discussions to close Duffields and relocate services to the NorthPort development on the current Jefferson Orchards property; and

Be It Further Resolved that the West Virginia Rail Authority supports the future implementation by Northport and property developers of the Northport MARC Train Station; and

Be It Further Resolved that the Board of Directors of the West Virginia State Rail Authority designates and empowers Executive Director Cindy Butler to conduct discussions and decision-making on the Northport Train Station with MARC and CSX Rail Corporation.

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
State Rail Authority

120 Water Plant Drive, Moorefield, West Virginia 26836
 (304) 538-2305 • TDD: (800) 742-6991 • FAX: (304) 538-7474

Earl Ray Tomblin
 Governor

Paul A. Mattox, Jr., P. E.
 Cabinet Secretary

Resolution of the West Virginia State Rail Authority

At a meeting of the Board of Directors of the West Virginia State Rail Authority duly called and held on the 24th day of January 2013, a quorum being present, the following was adopted:

Whereas, the Board of Directors was asked to support national legislation that will facilitate private and public investment into transit-oriented development around rail station in West Virginia.

Whereupon, on motion it was voted on and approved that:

That the WV State Rail Authority would support the passage of the Nation High Performance Passenger Rail Transportation-Oriented Development Act of 2013, as a way to promote the private-public financing needed for transit-oriented development around rail stations in West Virginia and nationally.

I, Max Scott, Secretary of the Board of Directors of the West Virginia State Rail Authority, do hereby certify that the foregoing action of the Board of Directors was properly voted upon and adopted at a meeting duly called and held on January 24, 2013, that such action of the board has not been repealed, revoked, rescinded or amended, and is in full force and effect as of the date hereof, and that such resolution does not conflict with any charter or by-law provision of the corporation.

The State Rail Authority

By: Max G Scott
 Secretary
 Board of Directors

Date: 1/30/13

Attest: Angela Lynn Myers

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

West Virginia State Rail Authority

January 24th, 2013

RESOLUTION

The Board of Directors of the West Virginia Rail Authority supports national legislation that will facilitate private and public investment into transit-oriented development around rail stations in West Virginia.

Whereas, the West Virginia Rail Authority seeks to promote transit-oriented development around commuter rail stations; and,

Whereas, funding for these developments is heavily dependent on private and public sector partnership; and,

Whereas, there is not currently a model to efficiently provide financing for the development of rail facilities while creating vibrant communities around station areas, and;

Whereas, the National High Performance Passenger Rail Transportation-Oriented Development Act of 2013 would create a body to efficiently manage such partnerships,

Now, Therefore,

Be It Resolved that the West Virginia Rail Authority, supports the passage of The National High Performance Passenger Rail Transportation-Oriented Development Act of 2013, as a way to promote the private-public financing needed for transit-oriented development around rail stations in West Virginia and nationally.



MARYLAND TRANSIT ADMINISTRATION

MARYLAND DEPARTMENT OF TRANSPORTATION

Martin O'Malley, Governor • Anthony G. Brown, Lt. Governor
Dairrell B. Mobley, Acting Secretary • Ralign T. Wells, Administrator

February 20, 2013

Ms. Cindy Butler
Director
West Virginia State Rail Authority
120 Water Plant Drive
Moorefield, West Virginia 26836

RE: Resolution of the West Virginia State Rail Authority

On January 24, 2013, the West Virginia Department of Transportation State Rail Authority ("State Rail Authority") approved a resolution supporting the relocation of our MARC stop at Duffields, West Virginia to Northport Station in Ranson, West Virginia.

MTA agrees with this proposal to exchange Duffield's for Northport, provided that the State Rail Authority will be responsible for this new station, regardless of who owns or supports this new station in the future. The new station must meet all current ADA, and level boarding requirements and must be completely at-grade (railroad) separated. The MTA installed a PA/LED system at the Duffield station that would also need to be relocated, without costs to the MTA, to the new station. There will be no crosswalks across the CSXT tracks and there must be an emergency plan in place prior to the station being activated and approved by both MTA and CSXT.

MTA agrees to work with the developers, the City and CSXT to support the building of this new station; however, MTA will not be responsible for any funding or failure to build this new station. Any and all expenses for CSXT to review plans and provide flagging during construction will be borne entirely by the State Railroad Authority or the developers.

The Agreement between the Maryland Transit Administration and the West Virginia State Rail Authority dated November 1, 2002 and as amended on November 6, 2008, makes the State Rail Authority responsible for the station properties at the Harpers Ferry, Duffields and Martinsburg, West Virginia stations. If the Northport Station is substituted for the Duffields MARC stop, the 2002 Agreement will need to be amended to substitute it for Duffields in the Agreement. We look forward to our continued working relationship and improving service for our MARC customers.

Sincerely,

John Hovatter
Director MARC Train and Commuter Bus services



1515 Washington Boulevard • Baltimore, Maryland 21230-1794 • TTY 410-539-3497 • Toll Free 1-866-743-3682

**MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF RANSON, WV &
JEFFERSON ORCHARDS, INC.**

This Memorandum of Understanding (MOU) is between the City of Ranson, WV (hereafter "City" or "Ranson") and Jefferson Orchards, Inc., concerning the implementation of the "Northport Station" project to establish a multi-modal transportation station on the Jefferson Orchards property that is consistent with the plan for future development of that property.

- 1.) ***Reservation and/or Dedication of Property to City of Ranson or Other Party for Development of Northport Station:*** Jefferson Orchards agrees to reserve up to 7.5 acres of land, at the site of the "Preferred Location" identified at pages 19 and 21 (Figures 18 and 19) of the June 2015 "Northport Station Feasibility Study" conducted by the Hagerstown-Eastern Panhandle Metropolitan Planning Organization ("HEPMPO"), for establishment and operation of the Northport Station project by either a public or private entity or partnership of both. The Northport Station Feasibility Study shall be attached hereto as Exhibit "A." The term "reservation" means that Jefferson Orchards shall not develop, allow to be developed, or take any development or land use action that is incompatible and inconsistent with the construction of the Northport Train Station or its associated infrastructure as shown on Figure 19 of the "Northport Feasibility Study." The land to be reserved is specifically identified in Figures 18 and 19 of the "Northport Feasibility Study" and such reserved land shall be made part of Jefferson Orchard's Land Development Plan and Plat dated March 16, 2012. This reservation and/or dedication of land is in consideration of: (1) Jefferson Orchards receiving funding through the City of Ranson to employ land use experts to plan, rezone and author an approved land development plan and plat for a Transit Oriented Development (TOD) through grant funding obtained by the City of Ranson from the U.S. Department of Housing and Urban Development (HUD Challenge Planning Grant); and, (2) in consideration of HEPMPO funding 100% of aforesaid feasibility study.

If the City of Ranson or another public or governmental entity agrees to partner with Jefferson Orchards and/or its successor to fund (either in total or partially) and construct Northport Station, Jefferson Orchards will deed land and/or grant easements specifically shown on Figure 19 of the "Northport Feasibility Study" sufficient and necessary to enable the construction and operation of the Northport Station including the passenger station, platforms, bridges, transit bus pick-up/drop-off facilities, access roadways, parking lots, stormwater management, and other associated facilities consistent with the terms and conditions below. The dedication of land and sufficient easements to construct station and associated infrastructure shall be at no cost, charge or commission to any public entity responsible for the construction and operation of Northport Station. Nothing in this Agreement shall preclude Jefferson Orchards and/or its successors from developing or retaining development rights on the reserved/dedicated property so long as such development is consistent with the approved zoning and Land Development Plan and Plat. Nothing in this Agreement shall preclude Jefferson Orchards from selling the land identified in Figures 18 and 19 of the "Northport Feasibility Study" so long as the successor or assigns abide by the terms contained in this Agreement and in accordance

with the approved Land Development Plan and Plat. The total amount of land that is actually used in this dedication will be determined when the Northport Station has completed 30% engineering or other appropriate milestone. This dedication of land and necessary easements are contingent upon the following:

- a.) Jefferson Orchards acknowledges it has a vested Land Development Plan and Plat pursuant to Chapter 8A of the West Virginia Code approved by the Ranson Planning Commission on March 16, 2012, which was made permissible under rezoning to Smart-Code New Community under Ranson Municipal Ordinance, Chapter 19A granted by the City of Ranson which allows for a Village, Town Center or Transit Oriented Development (TOD). Jefferson Orchards was identified by the City of Ranson in 2012 and selected to take part in funding received through Ranson's HUD's Challenge Planning Grant as a site that could be utilized to demonstrate SmartCode regulations to promote traditional-neighborhood, mixed-use and green-focused development. Jefferson Orchards rezoning and Land Development Plan and Plat was approved by the Ranson City Council and Ranson Planning Commission, in part, because of the "proposed relocation of Duffields MARC station and development of a Transit Oriented Development in an intended growth urban area. This area is also proposed for a Special Industrial District that would utilize the rail access." See City of Ranson 2012 City of Ranson Comprehensive Plan, Page 30.
- b.) Jefferson Orchards acknowledges that the "Northport Feasibility Study" identified the preferred station location (Figure 18 of Study) and completed a conceptual design plan (Figure 19) to illustrate and document potential station area site plans and specific design elements for the future Northport Station. A conceptual site plan for Northport Station was developed to illustrate proposed roadway access to the station, vehicle parking, abutting buildings, pedestrian facilities and the station building and platform structures (Figure 19).
- c.) Jefferson Orchards acknowledges and agrees that the land identified in Figure 19 of the "Northport Feasibility Study" shall be made part of and incorporated into the approved Land Development Plan and Plat; and, that such land shall be reserved by the Developer unless or until such time as the approved Land Development Plan and Plan is amended through the appropriate land use development processes of the City of Ranson. The land shall be reserved for the construction roadway access to the station, vehicle parking, abutting buildings, pedestrian facilities and the station building and platform structures. Nothing in this Agreement shall preclude Jefferson Orchards from constructing or retaining the private development rights within the land reserved so long as such development is not inconsistent with Figures 18 and 19 of the "Northport Feasibility Study" and the land development ordinances of the City of Ranson. The City shall not issue any permits inconsistent with Figures 18 and 19 of the Northport Feasibility Study unless or until the Land Development Plan and Plat is approved by both the Ranson Planning Commission and the Ranson City Council.

- d.) Jefferson Orchards or its assigns or transferees have the right to review and approve or disapprove the final design of Northport Station, for the purpose of ensuring that Northport Station will be compatible with any current or planned development and use of the remainder of the Jefferson Orchard's property. The design and construction of Northport Station shall comply with all land use regulations and building codes of Ranson and meet the criteria required for a train station by MARC, CSX, Amtrak and the West Virginia Rail Authority. This review and approval includes consideration of any future request for vehicle storage or maintenance facilities by the Eastern Panhandle Transit Authority and whether such use is compatible for overall land development plans.
- e.) Jefferson Orchards or its assigns or transferees shall maintain the right to sell, lease, and/or develop portions of the Northport Station acreage in accordance with and consistent with the approved zoning and Land Development Plan and consistent with Figures 18 and 19 of the "Northport Feasibility Study". Unless agreed under separate arrangement, no proceeds of such sale, lease or development of Northport land is required to be devoted to design, construction or operation of the public transit facilities. If Jefferson Orchards and/or its assigns agree to construct Northport Station and associated facilities, no dedication of land shall be necessary.
- 2.) **No Agreement on Future Funding:** Nothing in this MOU binds or commits either party to any responsibility for funding the consulting, pre-construction, construction, operations or maintenance of the Northport Station and associated facilities. Such costs, if any, will be allocated by the parties by separate agreement.
- 3.) **No Waiver or Agreement Concerning Zoning or Land Entitlements:** Nothing in this MOU provides any agreement between the parties that changes, alters or amends the zoning or land entitlements provided to Jefferson Orchards or its assigns/transferees on either the 7.5 acres or the remainder of the Jefferson Orchards property. Current zoning on the property permits Northport Station as an entitled use. Any petitions or requests for rezoning shall follow the requirements and procedures of the City of Ranson, but the terms contained in this Agreement and the fact that the land has been planned as a TOD shall be a consideration City Council considers while deliberating whether a rezoning or amendment to the Land Development Plan and Plat should occur.
- 4.) **Rights Transferable:** If the Northport Station project becomes owned or led by another entity, such as a state agency or public transit authority or other similar public party, the rights accorded to the City of Ranson under this MOU shall transfer by the adoption of a City Resolution to that public party after adequate notice to Jefferson Orchards. The rights and obligations accorded to Jefferson Orchards under this MOU shall be transferred to any buyer, assignee, transferee, or successor of and to Jefferson Orchards.
- 5.) **Access:** Jefferson Orchards provides the right of access to the reserved property to the City of Ranson and parties working in coordination with Ranson to establish Northport Station, for the purposes of site planning and development. Ranson shall provide

Jefferson Orchards with reasonable notice of the intent to access the site. If Ranson seeks to conduct environmental or archeological investigations at the dedicated property for the purpose of permitting and clearances for the Northport Station, Jefferson Orchards is required to reach an agreement with Ranson that provides such access, under terms and conditions agreed upon by the parties.

6.) **Land Value:** The parties agree that, to the extent that the value of the dedication of an easement and/or fee simple property can be used as matching resources for grants or other funding dedicated to the Northport Station project, the parties will recognize such value as a contribution by Jefferson Orchards.

7.) **Contacts & Authorized Representatives:** Unless provided by notice of a party, the following persons shall be the authorized representatives and contacts of the parties under this MOU:

City of Ranson
Andy Blake

City Manager
ablake@cityofransonwv.net
304.724.3872

Jefferson Orchards, Inc.
Authorized Representative
Mark Ralston
mhralson@gmail.com
214.808.4357

8.) **Recordation:** This Agreement shall be recorded in the land use records of Jefferson County.

9.) **Binding Effect of Agreement:** This Agreement shall be binding on and inure to the benefit of the parties to this Agreement and their heirs, personal representatives, successors and assigns.

DATED this _____ day of _____, 20____.

RANSON PLANNING COMMISSION

By: _____
Anthony Grant
Its: President

CITY OF RANSON

By: _____
A. David Hamill
Its: Mayor

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Citizen Organizations Opposed to Rockwool-Ranson

Listed organizations have issued public opposition statements (representative sample of statements attached)

Concerned Citizens Against Rockwool (10,000+ members)
 Eastern Panhandle Green Coalition
 West Virginians for Sustainable Development
 Resist Rockwool
 Jefferson County Vision
 Jefferson County Farmland Protection Board
 Jefferson County Historic Landmark Commission
 Jefferson County NAACP
 Appalachian Trail Conservancy
 American Academy of Pediatrics, WV Chapter
 Eastern Panhandle Protectors
 Corporation of Charles Town, WV
 Corporation of Shepherdstown, WV
 Corporation of Harpers Ferry, WV
 Loudon Against Rockwool
 Loudon County Board of Supervisors
 Loudon County Equine Alliance
 City of Leesburg, VA
 Town of Lovettsville, VA
 Town of Hamilton, VA
 Town of Hillsboro, VA
 Town of Middleburg, VA
 Town of Round Hill, VA
 Town of Purcellville, VA
 City of Brunswick, MD
 Town of Keedysville, MD
 Town of Sharpsburg, MD
 Mid-Atlantic Center for Children's Health and the Environment
 Ohio Valley Environmental Coalition
 Potomac Valley Audubon Society
 Sierra Club, WV Chapter
 WV Citizens Action Group
 WV Interfaith Power and Light
 Women's March, WV Chapter



**RESOLUTION OF JEFFERSON COUNTY HISTORIC LANDMARKS COMMISSION
OPPOSING CONSTRUCTION OF THE ROCKWOOL PLANT KEARNEYSVILLE, WV**

DULY ADOPTED ON OCTOBER 10, 2018

WHEREAS, ROCKWOOL INC. plans to build a large industrial manufacturing plant on the former Jefferson Orchard Property off Old Route 9;

WHEREAS, ROCKWOOL'S plant will have two smoke stacks approximately 213 feet high;

WHEREAS, ROCKWOOL is in proximity to one National Historic Landmark and twenty-four structures listed or eligible for the National Register of Historic Places;

WHEREAS, ROCKWOOL'S plant will adversely effect the view shed and rural landscapes of Jefferson County;

RESOLVED, that the JEFFERSON COUNTY HISTORIC LANDMARKS COMMISSION formally and vehemently oppose the construction of the ROCKWOOL plant.

Martin Burke

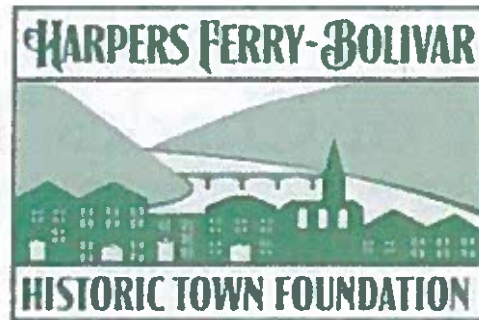
Martin Burke, Chair

[Signature]

Hugh Koonce, Secretary

[Signature]

Ben Horter, Commissioner



September 13, 2018

The Harpers Ferry-Bolivar Historic Town Foundation's mission is to preserve historic resources and promote our community. We envision Harpers Ferry and Bolivar as one vibrant community with an engaged citizenry, 19th century character, and 21st century service, preserving each town's rich heritage and robust economy. Our core values include valuing the historic and natural resources of Harpers Ferry and Bolivar and recognizing that these resources need to be protected and preserved. The scenic beauty of our region along with the outdoor recreation opportunities it offers is key to ensuring this area remains vibrant and successful for our residents and visitors alike.

The proposed Rockwool facility, located in nearby Ranson, WV has raised many serious concerns among members of the Foundation's Board. The 21-story smokestacks will be emitting 470 tons of Volatile Organic Compounds and 239 tons of nitrogen oxides per year. In addition, the 460,000+ square foot facility, with twenty-four/seven operations, will create increased noise, light pollution and traffic, including staging for 100+ tractor trailers per day. In addition to health and environmental concerns, there is also the possibility of contamination to our primary water source, the Elks Run Watershed.

The Foundation understands that our area's continued popularity and attraction for visitors is dependent on our preserving our historic and environmental resources. We also join our neighbors in demanding a safe and healthy community. A factory of this size and with the potential for significant negative impact to our air, water and viewsheds, is of great concern.

Because of this, the Foundation supports the immediate stop to all work currently underway at the Rockwool site. It is imperative that further evaluation as to the impacts from the factory be undertaken. In addition, the Foundation is unlikely to support any economic development plans for our county in the future that include heavy industrial manufacturing similar in scope and size to the Rockwool facility.

PO Box 1427 ★ Harpers Ferry, WV 25425

www.historicharpersferry.org



City of Charles Town

101 East Washington Street, P.O. Box 14, Charles Town, WV 25414
Phone: (304) 725-2311 ♦ Web: www.charlestownwv.us

RESOLUTION

Charles Town City Council Statement Regarding the Proposed Rockwool Facility

WHEREAS, the City of Charles Town Council enacted a Zoning Ordinance, Zoning Map and Subdivision and Land Development Ordinance in 2012 that eliminated previously permitted industrial uses in the City of Charles Town; and

WHEREAS, in 2018 the City of Charles Town Council adopted the Historically Hip 2040 Comprehensive Plan with significant public input and in which heavy industrial development in the City was not envisioned or desired; and

WHEREAS, the Jefferson County Commission and the elected bodies of four of Jefferson Counties' five municipalities, including the City of Charles Town, have expressed agreement that heavy industry is not acceptable or desired within their comprehensive or master plans; and

WHEREAS, the City of Charles Town Council believes that this proposed heavy industrial facility will negatively impact the County's tourism industry, agricultural production and the ability to attract new residents and sustainable businesses to Jefferson County and Charles Town; and

WHEREAS, the City of Charles Town operates a municipal public utility chartered by the State of West Virginia; and

WHEREAS, regardless of any future action the City of Charles Town may take related to sewer access or the financing of the construction of any sewer infrastructure to the proposed Rockwool site.

NOW THEREFORE BE IT RESOLVED, the City of Charles Town Council believes the Rockwool facility should be located in an area in which the majority of residents expressed, through the narratives of their comprehensive or master plans, the desire for and acceptance of heavy industry.

Adopted the 22nd day of JANUARY, 2019.



Scott Rogers
Mayor

Attest:


Daryl Hennessy
City Manager/Clerk

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)



CORPORATION OF SHEPHERDSTOWN

104 NORTH KING STREET
P.O. BOX 248
SHEPHERDSTOWN, WEST VIRGINIA 25443-0248
TEL: (304)876-2312
FAX: (304) 876-1473

September 12, 2018

A position letter on the proposed Rockwool Plant to be constructed in Jefferson County, West Virginia

The Corporation of Shepherdstown is known for its commitment to protecting the environment. Therefore, after hearing the concerns from its residents and greater community members, the Corporation of Shepherdstown expresses its strong opposition to the Rockwool Plant that has been proposed to be built in Jefferson County. Heavy industry and all that it brings are in direct conflict with our vision, principles and comprehensive plan.

The Shepherdstown Community believes the Rockwool Plant is a present threat to the health, safety and welfare of our citizens, natural resources, and wildlife.

Finally, the Shepherdstown Community is committed to educating the public on the potential threat of the Rockwool Plant to our natural resources, air quality and public health. The Shepherdstown Town Council votes to support our community and Eastern Panhandle neighbors in opposing the Rockwool Plant.

Arthur J. Auxer, III

Mayor



Corporation of Harpers Ferry

1000 WASHINGTON STREET • P.O. BOX 217

Harpers Ferry, West Virginia 25425

304-535-2206 • FAX 304-535-6520

Wayne Bishop

MAYOR

COUNCIL MEMBERS

BARBARA HUMES
HARDWICK S. JOHNSON, JR.
CHARLOTTE THOMPSON
ED WHEELLESS
MIDGE FLINN YOST

RECORDER
KEVIN GARDEN

TOWN CLERK
NANCY CUMMINS

BOOKKEEPER
DEBBI KELLY

Corporation of Harpers Ferry's Position and Action Concerning the Proposed Rockwool Major Stationary Source of Hazardous Air Pollution

The Corporation of Harpers Ferry is strongly opposed to the Rockwool plant that has been proposed for Jefferson County. Heavy industry, and this plant in particular, are in direct conflict with both our comprehensive plan and our vision.

We believe the Rockwool plant is a present threat to the health, safety, and welfare of our citizens and natural resources. We are prepared to take necessary steps against Rockwool, in order to protect our people and our natural resources, to the fullest extent of the law.

Further, we instruct the Harpers Ferry representative to the JCDA, Karan Townsend, to represent the will of our citizens and elected officials by opposing any proposed bonds that would support infrastructure to the proposed Rockwool site, including an upcoming third reading and vote on the same.

Finally, we are taking action to educate all of our citizens and neighbors on the Rockwool threat. We support the citizens who are opposing this project, and

Historic District
Where The Shenandoah Meets The Potomac

encourage our neighboring municipalities to join us in keeping heavy industry and Rockwool in particular out of Jefferson County.

Signed:

Mayor Wayne Bishop

Kevin Carden, Recorder

Town Council Members: Barbara Humes

Hardwick Johnson

Ed Wheelless

Charlotte Thompson

Midge Flinn Yost



Loudoun County Equine Alliance

Serving The Loudoun County Equine Community

September, 2018

The Loudoun County Equine Alliance (LCEA) shares your concerns about the construction of the Rockwool manufacturing facility in Ranson, WV. We thank you for requesting that our county take a closer look at this project and examine options for action. We are working within the Loudoun equine industry to obtain more information on the potential effects here.

Our concerns are:

- **Air quality for horses and riders, especially those performing at highly aerobic activities** such as those in training for competition for various horse sports, as many horses in Loudoun County are. We are making inquiries among our equine veterinary community, including veterinarians at the Marion duPont Scott Equine Medical Center, to gather specific data on this subject.
- **The subsequent effects on Loudoun's equine industry if detrimental effects from the plant are established or even perceived by the public.** These could include loss of horse population, reduction of attendance at competitions, reduced value of horse properties, and the subsequent harm to businesses that support the equine industry, such as hay producers, feed suppliers, veterinarians and equine hospitals. The equine industry in Loudoun has been shown to have an annual economic impact of \$181 million per year.
- **The spillover effects on Loudoun's equine industry of the plant's harmful effects on the Thoroughbred racing industry** in our area. The racetrack at Charles Town has been calculated to have an annual economic impact of over \$191 million in Jefferson County (WV) alone, and is the only Thoroughbred racetrack in the region. (There are currently no operating Thoroughbred racetracks in Virginia.)
- **The negative impact the Rockwool plant could have on all sectors of Loudoun's rural economy** (vineyards, B & Bs, agricultural producers, etc.) which are all dependent on beautiful vistas, clean air, excellent growing conditions, etc., and are interdependent on each other.
- **The potential for this Rockwool installation to become the first of many heavy industrial uses** in an area within close proximity to our precious rural countryside.

Again, we appreciate and support your efforts to examine the issue of Rockwool's potential impact on our county.

Sincerely,

Kelly Foltman, DVM, LCEA President
 Michelle King, LCEA Vice President
 Marion Lee, LCEA Secretary
 Stephanie Jennings, LCEA Treasurer
 Louise Cotulla, LCEA Board Member
 Emily Houston, LCEA Board Member
 Christie Kimberlin, LCEA Board Member
 Tori Sullivan, LCEA Board Member
 Janet Vandervaart, LCEA Board Member

P O Box 293 – Purcellville, Virginia 20134 information@LoudounEquine.org

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

The Town of
Leesburg,
Virginia

PRESENTED: December 11, 2018

RESOLUTION NO. 2018-158

ADOPTED: December 11, 2018

A RESOLUTION: AUTHORIZING THE MAYOR TO SEND A LETTER OF SUPPORT FOR LOUDOUN AGAINST ROCKWOOL

WHEREAS, in April 2018, the State of West Virginia issued a permit allowing the release of 392 tons of potentially hazardous air pollution per year to the Rockwool Corporation for a proposed mineral wool manufacturing plant to be located in the City of Ranson, Jefferson County, West Virginia; and

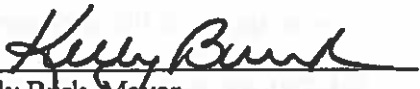
WHEREAS, the proposed Rockwool plant site is located just ten miles from Loudoun County; and

WHEREAS, residents of Jefferson County, West Virginia, and Loudoun County, Virginia have organized to appeal for reconsideration of the Rockwool air permit, citing air pollution concerns; and

WHEREAS, representatives from Loudoun Against Rockwool made a presentation to the Leesburg Town Council on November 13, 2018, and requested that the Council send a letter in support of their request to halt the construction of the plant until a comprehensive study of the environmental impacts to Virginia is completed.

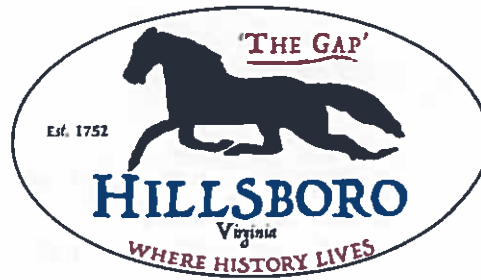
THEREFORE, RESOLVED, by the Council of the Town of Leesburg in Virginia, the Mayor is authorized to send a letter in support of Loudoun Against Rockwool.

PASSED this 11th day of December, 2018.


 Kelly Burk, Mayor
 Town of Leesburg

ATTEST:


 Clerk of Council



Resolution 2018-10-004:

REQUESTING VIRGINIA COMMONWEALTH AND LOUDOUN COUNTY AUTHORITIES AND STATE AND FEDERAL LEGISLATORS USE ANY AND ALL LEGAL POWERS TO HALT CONSTRUCTION OF THE ROCKWOOL FACILITY IN JEFFERSON COUNTY, WEST VIRGINIA, PERMITTED TO EMIT 392 TONS OF HAZARDOUS POLLUTION ANNUALLY INTO THE AIR RESIDENTS OF THE TOWN OF HILLSBORO AND LOUDOUN COUNTY MUST BREATHE

MOTION: Moskal

SECOND: Oxman

WHEREAS, the historic Town of Hillsboro and nationally recognized Hillsboro Historic District is situated in the gap of the Short Hill Mountains in the rural Northwest quadrant of Loudoun County, surrounded by mountain side forests and historic and productive farmlands, recreational and scenic attractions, and

WHEREAS, the Town of Hillsboro has been at the forefront in the efforts to preserve the Greater Hillsboro historic assets, conserve and support the area farmlands and rural essence, and protect the environmental quality of the area, and the revitalization of the area's economy that is based on agricultural production, agro-tourism and recreational-based tourism, and

WHEREAS, in the past 15 years the Greater Hillsboro area has seen the establishment of more than a dozen vineyards and wineries, farm breweries, numerous small specialty farming operations and a continuation of centuries-old traditional farming and livestock operations, all dependent on clean air and water, and

WHEREAS, the Greater Hillsboro area has seen a significant growth of tourism and the expansion of leisure travel accommodations to encompass the largest concentration of bed & breakfast inns in Loudoun County, hosting thousands of visitors seeking to enjoy the rural surroundings and recreational activities as well as the mountain vistas and clean air, and

WHEREAS, the northwest quadrant of Loudoun County is culturally and economically dependent upon an environment free from excessive air and water pollution that would harm its citizens' health, degrade its agricultural products, inhibit and discourage tourism and devalue its citizens' quality of life and property values, and

WHEREAS, the Town of Hillsboro is situated within five miles of the West Virginia border and within 10 miles of the city of Ranson, West Virginia, and the Greater Hillsboro area fully abuts and shares a 17-mile border with Jefferson County, West Virginia, and

WHEREAS, the prevailing winds reaching the northwest quadrant of Loudoun County bring with it air and any pollution contained therein directly from Jefferson County, West Virginia, impacting the people, water, livestock and plants in Loudoun County, and

WHEREAS, the State of West Virginia has granted the Rockwool corporation a permit for the release of 392 tons per year of hazardous air pollution, to be emitted from a proposed manufacturing plant in the Town of Ranson, West Virginia, approximately 10 miles from the Town of Hillsboro, and

WHEREAS, currently the measured hazardous air pollution emitted in Jefferson County, West Virginia and Loudoun County, Virginia is negligible, and

WHEREAS, the 392 tons per year of hazardous air pollution to be permitted by the State of West Virginia will be most concentrated and have the most direct and detrimental impact on the health of the Virginian citizens of the Town of Hillsboro and Loudoun, its agricultural products, its businesses and its natural attributes so dependent on clean air and water, and

WHEREAS, the State of West Virginia, the County of Jefferson, West Virginia, and the Town of Ranson, West Virginia, have provided financial assistance and forgivable loans to the Rockwool corporation to encourage the establishment of this facility in close proximity to the Town of Hillsboro and Loudoun County, Virginia, and

WHEREAS, thousands of residents of Jefferson County, West Virginia, and Loudoun County, Virginia, have organized to appeal for reconsideration of the permit for the release of 392 tons per year of hazardous air pollution from the Rockwool facility and,

WHEREAS, the health of the citizens and economy of the Town of Hillsboro and Loudoun County will be directly imperiled by the action of emitting 392 tons of hazardous air pollution annually into the air that the residents of and visitors to the Town of Hillsboro and Loudoun County must breathe, and

WHEREAS, it is the duty and obligation of the elected and appointed officials of the Town of Hillsboro, Loudoun County and Commonwealth of Virginia to exercise any and all powers to protect the life, health and wellbeing of their citizens,

NOW, THEREFORE, BE IT RESOLVED by the Hillsboro Town Council that the Town of Hillsboro requests the Governor and Attorney General of the Commonwealth of Virginia, the Loudoun County Board of Supervisors and the Town of Hillsboro's state and Federal legislative representatives take any and all legal action to immediately bring to a halt the construction of the Rockwool facility until a more comprehensive study of the impact on Virginia has been completed, including a designated geographic impact zone for air quality, drinking and ground water sources, and

BE IT FURTHER RESOLVED, if in the event the facility becomes operational, a monitoring plan including baseline and recurring air quality sampling be implemented and all costs of study and monitoring are borne by Jefferson County or the State of West Virginia.

VOTE:

AYES: Vance, Moskal, Marasco, Oxman, Forbes

NAYS: None

ABSTENTIONS: None

ABSENT FOR VOTE: Johnston

APPROVED October 29, 2018



ROGER L. VANCE, MAYOR

ATTEST:



CLAUDIA FORBES, ACTING RECORDER

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

**TOWN OF HAMILTON
LOUDOUN COUNTY, VIRGINIA**

RESOLUTION: 2018-17 **PRESENTED:** December 10, 2018 **ADOPTED:** December 10, 2018

A RESOLUTION: REQUESTING VIRGINIA COMMONWEALTH AND LOUDOUN COUNTY AUTHORITIES AND STATE AND FEDERAL LEGISLATORS USE ANY AND ALL LEGAL POWERS TO HALT CONSTRUCTION OF THE ROCKWOOL FACILITY IN JEFFERSON COUNTY, WEST VIRGINIA

WHEREAS, the northwest quadrant of Loudoun County is culturally and economically dependent upon an environment free from excessive air and water pollution that would harm its citizens' health, degrade its agricultural products, inhibit and discharge tourism, and devalue its citizens' quality of life and property values, and

WHEREAS, the Town of Hamilton is situated within 16 miles of Ranson, West Virginia and,

WHEREAS, the prevailing winds reaching Hamilton and the northwest quadrant of Loudoun County bring with air and any pollution contained therein directly from Jefferson County, West Virginia, impacting the people, water, livestock, and plants in Loudoun County, and,

WHEREAS, the State of West Virginia has granted Rockwool Corporation a permit for the release of 392 tons per year of hazardous air pollution, to be emitted from a proposed manufacturing plant in the Town of Ranson, West Virginia, and

WHEREAS, currently the measured hazardous air pollution emitted in Jefferson County, West Virginia and Loudoun County, Virginia is negligible, and

WHEREAS, the 392 tons per year of hazardous air pollution to be permitted by West Virginia will have direct and detrimental impact on the health of the citizens of Loudoun County, its agricultural products, its businesses, and its natural attributes so dependent on clean air and water, and

WHEREAS, thousands of residents of Jefferson County, West Virginia, and Loudoun County, Virginia have organized to appeal for reconsideration of the permit for the release of 392 tons per year of hazardous air pollution from the Rockwool facility, and

WHEREAS, the health of the citizens and economy of the Town of Hamilton and Loudoun County will be imperiled by the action of emitting 392 tons of hazardous air pollution annually into the air that the residents and visitors to the Town of Hamilton and Loudoun County must breathe,

THEREFORE, BE IT RESOLVED by the Hamilton Town Council that the Town requests the Governor and Attorney General of the Commonwealth of Virginia, the Loudoun County Board of Supervisors, and the Town's state and federal legislative representatives take any and all legal action to bring an immediate halt to the construction of the Rockwool facility until a more comprehensive study of the impact on Virginia has been completed, including a designated geographic impact zone for air quality, drinking and ground water sources.

ADOPTED THIS 10th **DAY OF** December **2018**


David R. Simpson, Mayor

ATTEST: 
Jennifer Noel, Town Recorder

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Jeffrey A. Cline, *President*
 Terry L. Baker, *Vice President*
 Krista L. Hart, *Clerk*



Wayne K. Keefer
 Cort F. Meinelschmidt
 Randall E. Wagner

100 West Washington Street, Suite 1101 | Hagerstown, MD 21740-4735 | P: 240.313.2200 | F: 240.313.2201
 WWW.WASHCO-MD.NET

June 7, 2019

West Virginia Department of Environmental Protection
 22288 Northwestern Parkway
 Romney, WV 26757

Re: Proposed Rockwool Factory Ranson, WV

To the West Virginia Department of Environmental Protection:

The Washington County Board of County Commissioners would like to convey the concerns of citizens which approached the Board on record in its June 4, 2019 meeting. These citizens, and organizations they represent, shared several potential impacts surrounding the proposed Rockwool Factory in Ranson, West Virginia.

Citizens have expressed concern over the 21 story exhaust stacks, the potential effects of factory exhaust upon nearby schools as well as citizens of all ages, at least nine different categories of air pollution from the proposed factory, and Volatile Organic Compounds anticipated from the proposed factory.

We, the Washington County Board of County Commissioners, would like to support various efforts taken to meet or improve our air quality in Washington County. With this communication, we endeavor to be attentive to the concerns of our constituents and any potential detriment to air quality in Washington County.

Sincerely,

BOARD OF COUNTY COMMISSIONERS OF
 WASHINGTON COUNTY, MARYLAND

By: 
 Jeffrey A. Cline President

Cc: Board of County Commissioners
 Robert Slocum, County Administrator
 Dan Divito, Director, Division of Environmental Mgmt

Individuals requiring special accommodations are requested to contact the Office of the County Commissioners, 240.313.2200 Voice/TDD, to make arrangements no later than ten (10) working days prior to the meeting.

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)



THE CITY OF BRUNSWICK MARYLAND

1 WEST POTOMAC STREET · BRUNSWICK, MARYLAND 21716 · (301) 834-7500

October 11, 2018

At their October 9, 2018 meeting, the Mayor and Council of Brunswick voted unanimously to strongly oppose the proposed construction of the Rockwool Plant in Jefferson County, West Virginia.

After hearing the concerns of residents of our town and those of neighboring towns, we feel heavy industry such as the proposed project will bring detriment to the environment and those that live in the surrounding areas.

Brunswick is known for the Potomac River and the C&O Canal Towpath. People frequent our small city to bike, hike, camp, and generally enjoy nature. We feel this project is a potential threat to the health, safety, and welfare of our citizens, visitors, natural resources, and wildlife.

Sincerely,

Jeffrey T. Snoots
Mayor, City of Brunswick

Council Members: Nathan Brown, John Dayton, Vaughn Ripley, Tom Smith, Andrew St. John, Angel White

INCORPORATED 1890

BIG TOWN
SMALL CITY

BRUNSWICKMD.GOV

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

TOWN OF KEEDYSVILLE, MARYLAND

"Where Northern Thrift and Personality Blend with Southern Charm and Hospitality"

P.O. Box 859
19 South Main Street
Keedysville, MD 21756
301-432-5795
www.keedysvillemd.com



Ken Lord, Mayor
Barry Levey, Assistant Mayor
Gina Ellis, Council Member
Judy Kerns, Council Member
Matthew Hull, Council Member

October 24, 2018

Re: Proposed Rockwool Plant

The Town of Keedysville is a quiet pleasant community in southern Washington County, Maryland. The Mayor & Council are committed to maintaining the beautiful and healthy environment found here, for the residents of the town and its visitors.

After hearing concerns expressed by our residents and information presented by Concerned Citizens Against Rockwool concerning the Rockwool plant, the Mayor & Council of Keedysville voted unanimously on September 5th to join neighboring jurisdictions in Maryland, Virginia and West Virginia in expressing our opposition to this facility. We are deeply concerned by the potential long-term threats to air and water quality this plant represents, not just for the Eastern Panhandle, but our entire region. The impacts of such a facility have the potential to reach far beyond the jurisdiction in which it was built.

Therefore, the Mayor and Council of Keedysville join many surrounding jurisdictions in the Eastern Panhandle and beyond in expressing our strong opposition to the construction of the Rockwool plant.


Ken Lord, Mayor



Town of Sharpsburg
 106 E Main Street
 PO Box 368
 Sharpsburg, MD 21782
 301-432-4428
www.sharpsburgmd.com
townofsharpsburg@comcast.net

Sharpsburg, Maryland Statement of Opposition against Proposed Rockwool Ranson Factory

At our Town Meeting on September 10, 2018, the town of Sharpsburg, Maryland was informed by a group of concerned citizens about the plans for the proposed Rockwool factory in Jefferson County, WV. This site would be located just 13 miles from our historic town.

Sharpsburg is the second oldest town in Washington County, Maryland. We are historic because the Battle of Antietam was fought here, and at the nearby Antietam National Battlefield. Thousands of visitors frequent our town annually, creating much vehicular and foot traffic. We have pedestrian crosswalks and congested intersections. Sharpsburg is a 25 mile per hour zone, and there is a school within the town limits.

Our Mayor and Town Council have many unanswered questions about the proposed Rockwool factory and the introduction of more heavy industry to our region in general. We are concerned about the negative impacts this would have on the environment, the potential for increased traffic, and the subsequent effects on our citizens' public health and quality of life. There also seems to be a genuine potential for adverse effects on the local tourism economy.

It seems clear to us that Sharpsburg, Maryland has nothing to gain from Rockwool or any increase of heavy industry. Sharpsburg, therefore, will stand firm in its support of our neighboring municipalities who have opposed this project, including Harper's Ferry, WV and Shepherdstown, WV. We are committed to educating our citizens about the project, and we encourage other neighboring municipalities to join us in opposition.

[The following text is extremely faint and largely illegible. It appears to be a multi-paragraph document, possibly a report or a set of minutes, containing various sections and headings. The text is mirrored across the page, suggesting it might be bleed-through from the reverse side.]



Potomac Valley Audubon Society

www.PotomacAudubon.org | P.O. Box 578, Shepherdstown, WV 25443 | 304-676-3397

To: Jefferson County Officials and Community Members
 From: Potomac Valley Audubon Society
 Re: Opposition Statement on Rockwool Plant proposed for Jefferson County, WV

The Potomac Valley Audubon Society (PVAS) has served Berkeley, Jefferson and Morgan Counties in West Virginia since its founding in 1982 as a chapter of the National Audubon Society. We currently have 828 household members; 301 of those households are located in Jefferson County. Our mission is "preserving, restoring, and enjoying the natural world through education and action." The organization provides leadership in environmental, conservation, and natural history concerns in our region. We manage four nature preserves in the Eastern Panhandle totaling over 500 acres, provide science education to over 8,000 school children annually, serve children in our community through our nature camp programs, and offer adult programs focused on natural history. We participate in efforts to save natural habitat locally and in other areas of WV and provide assistance to citizens in monitoring conservation actions in our community.

Rockwool would set a dangerous and unnecessary precedent for air pollution and water pollution in Jefferson County. Placement of a heavy industry and a new major source of air emissions of pollutants in the heart of Jefferson County goes against our mission. We want to see air quality and habitat preserved so that the residents of the county, particularly children, can enjoy the outdoors in a healthy environment, not one that is characterized by potentially dangerous levels of carcinogens and other hazardous pollutants.

Our main concerns stem from:

- 1. Threats to Air Quality:** PVAS encourages people to be outdoors. The addition of emissions from Rockwool to air quality in Jefferson County poses a threat to all residents but particularly to the most vulnerable in society—the children, the elderly, and those with compromised respiratory systems.
- 2. Threats to Water Quality:** PVAS is concerned that atmospheric deposition of pollutants originating at Rockwool will contaminate streams and wetlands. We are further concerned about the viability of onsite wastewater settling ponds. WV does not have a good record of regulating slurry ponds at mountaintop removal sites where leakage from ponds has poisoned local aquifers, wells, and streams.
- 3. Threats to Streams, Wetlands, and Rare Marl Marshes:** The health of streams, wetlands, and marl marshes and the valuable habitat they support is dependent on the elevation of the water table. Rockwool proposes to withdraw 125 thousand gallons of water per day at first and up to 500 thousand gallons of water per day in the future. The internal underground drainage systems in karst areas like we have in Jefferson County are very sensitive to extraction. Removing this much water from the aquifers can have very serious and unpredictable adverse consequences. Lowering of water tables can affect the hydrologic equilibrium of local streams as well as wetlands, including rare marl marshes, at substantial distances from the point of extraction. The potential impact is loss of critical wetland and riparian habitat for threatened and endangered species of plants and other forms of wildlife.

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 and the Combined Federal Campaign (#29061).*



4. Threats to Endangered, Threatened, and Rare Species: In addition to the twenty-seven rare species found in our local marl marshes, there is one federally-listed Threatened Species identified in Jefferson County: the Madison Cave Isopod. This isopod, a small crustacean that lives in groundwater has been documented in three locations in Jefferson County including two sites near Rockwool. We are not aware that Rockwool has investigated the environmental impact that its proposed pumping will have on this important Threatened Species. There are other species of great concern found in streams, marshes, fields and ridges in our area. For example, the WVDNR identified several "High Quality and State Mussel Streams" in Jefferson County including Evitts Run, Bullskin Run, Elks Run, and Long Marsh Run. The USFWS and the WVDNR also maintain lists of species of concern. The Baltimore Checkerspot butterfly and Sedge Wren have also been identified at our Cool Spring Preserve, and are both conservation species of concern. As far as we know, Rockwool has not investigated the environmental impact that its proposed atmospheric emissions and pumping will have on other species of concern.

5. Threats to Migratory Birds: PVAS has a particular interest in not only the indigenous bird populations, but migratory birds as well. Positioned on the Atlantic Flyway and immediately to the east of the Allegheny Front, many migrating birds take advantage of the winds that waft off the mountains and ridges of the Appalachian range to mitigate the challenges to their biennial long-distance flights. By definition, all migratory birds are protected under the Migratory Bird Treaty Act, which not only protects the birds themselves but also sets stipulations to protect habitats necessary for the birds' survival. The air emissions from the Rockwool plant, especially particulate matter, will create hazards to migrating birds using the Atlantic Flyway. We are not aware that Rockwool has investigated the potential impact of its emissions on migrating birds.

In light of these threats, and the fact that Rockwool has not fully investigated the potential environmental impacts that we mention, we urge you to reject the siting of the Rockwool plant and to choose a path of development more compatible with protecting human health and the conservation of the natural resources and sensitive habitats found in Jefferson County.

Sincerely,



Suzanne Offutt, Board President

*A proud partner of the United Way of the Eastern Panhandle
and the Combined Federal Campaign (#29061).*





West Virginia Chapter
P. O. Box 4142
Morgantown, WV 25404

Roxul, USA, a subsidiary of the Rockwool Group, is building a facility for the manufacture of mineral wool in Jefferson County, West Virginia. The manufacturing process will depend upon burning coal and natural gas to liquify basalt rock, which will then be spun into long, thin fibers to be used in insulation.

West Virginia Sierra Club opposes the construction of the Rockwool facility and the production of mineral wool in Jefferson County, WV.

This project raises concerns about the factory's potential adverse effect on quality of life, health, and the local economy. According to the permit, the company estimates that each year, the facility will emit over 359 tons of hazardous air pollutants, including carbon monoxide, nitrous oxide, particulates, sulfur dioxide, volatile organic compounds, sulfuric acid, and lead. The greenhouse effect of the factory's emissions will be the equivalent of 152,934 tons of carbon dioxide.

The factory will have two tall smokestacks intended to disperse these emissions. However, Jefferson County is subject to temperature inversions, which reduce or prevent dispersal.

Four schools are nearby, including an elementary school less than half a mile away from the factory. Parents, teachers, pediatricians, and the school board are concerned about health impacts on the students. Furthermore, 60 to 90 trucks will pass the school daily, delivering materials and shipping product out. Medical professionals have also expressed concerns over harm to susceptible adults.

In addition, Rockwool has not produced a clear estimate of the amount of water that will be discharged into the local sewer system, or the nature of the waste materials that it will contain. The effluents will enter a local stream and make their way to the Chesapeake Bay, creating a setback in its recovery.

This area is prone to the development of sinkholes, as the rock underneath is a porous limestone that tends to collapse. In fact, after construction began, a new sinkhole developed on the site of the factory. These sinkholes allow contaminated surface water to enter the groundwater.

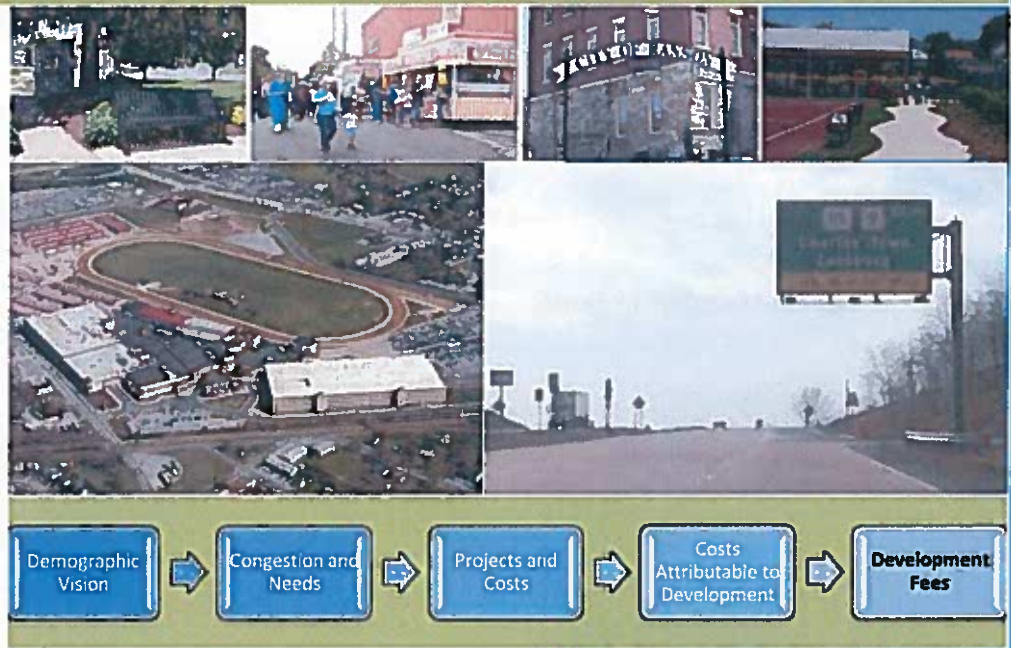
This factory, if allowed to go into production, would be West Virginia's second largest emitter of volatile organic compounds. It will harm the Chesapeake Bay. Through the combustion of coal and natural gas, it will add to the greenhouse effect. It will transform the local area from a rural community to an industrial zone, damaging the quality of life in Jefferson County and nearby counties in Virginia and Maryland.

For all of these reasons, the West Virginia Sierra Club finds the construction and operation of this facility unacceptable. Construction should be halted and the Rockwool Group should withdraw from Jefferson County.

Aileen Curfman
Co-Chair
West Virginia Sierra Club

The Cities of Ranson and Charles Town

Transportation Development Fee Study



Prepared By:
Michael Baker Jr., Inc.

Baker

Prepared For:
Hagerstown/Eastern Panhandle MPO
City of Ranson
City of Charles Town

6/10/2011

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SECTION 1: INTRODUCTION

This report summarizes the technical methodologies and assumptions used to estimate a transportation development fee for Ranson and Charles Town, West Virginia. The region has experienced development pressures in recent years and significant growth is expected over the next 20 years according to *Direction 2035*, the current Hagerstown/Eastern Panhandle Metropolitan Planning Organization (HEPMPO) Long-Range Transportation Plan (LRTP). With limited state funding available for local transportation improvements, a transportation-specific development fee has been identified as one possible method to assist in funding key transportation infrastructure improvements that would support regional access and reduce congestion. The transportation development fees would be implemented as municipal fees as enabled by West Virginia Code §8-13-13, which provides that every municipality has the plenary power and authority to impose an ordinance fee to support municipal services including the maintenance and improvement of streets within its jurisdiction.

The fee structure was developed through a cooperative effort involving the West Virginia Department of Highways (WVDOH), HEPMPO, county and city staff with the assistance of a consultant. The following key principles were used to guide the development of the fee structure:

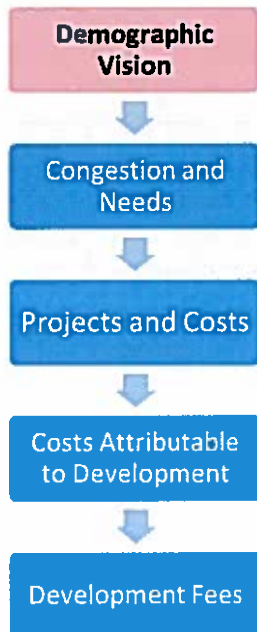
- Legally and technically defensible
- Financially constrained
- Related to “real” project needs
- Fair and consistent
- Simple to administer

The primary steps to estimate the transportation development fee structure included estimating a “build-out” growth scenario, analyzing roadway congestion needs, identifying potential transportation projects to address those needs, allocating project costs to new development, and estimating the fee structure for different land use types. Each of these steps and the resulting fee structure is described within this technical report. Appendices have been included providing additional information and technical details for reference. Appendix D provides a two page overview of the fee structure that can serve as a primary distribution resource.

To ensure the analysis was reasonable and defensible, this study included data collection efforts to obtain traffic counts, interactions with city staff to identify developments that have been previously proposed or discussed, use of the regional travel demand model to estimate traffic congestion, and use of national trip generation references to assist in the development of the fee structure. The project identification process was based on a thorough review of congestion, mobility and safety needs within the urban growth area. The fee structure has included adjustments to ensure that new development is fairly assessed their portion of project costs. The analyses have included methodologies to account for existing congestion levels and the current and future congestion burden due to regional through travel.

Future updates to this report may be warranted as updated projects lists, costs and development growth become available. It is the hope of both cities that this report and the projects included are not only used for fee development but also used as a long term plan for identifying key needs and evaluating alternative options to improve the transportation infrastructure in the region.

SECTION 2: DEVELOPING A DEMOGRAPHIC BUILD-OUT SCENARIO



The transportation development fee calculations are based on a forecast demographic “Build-out” scenario for Ranson and Charles Town. The forecasts account for growth within and outside the urban growth boundary. The demographic forecasts are used in the fee calculation process as follows:

- Affects the analysis of transportation congestion and needs
- Used to determine trip growth and cost per trip end values

The demographic data is translated into vehicle trips and traffic volumes using the HEPMPO regional travel model. This model was also used to support the development of the regional LRTP covering the three counties within the MPO (Jefferson, Berkeley and Washington counties).

The development of the demographic forecasts required significant input from staff in each city. The term “Build-out” is often correlated with a scenario to develop all available (e.g. “developable”) land based on assumed densities, possibly from zoning parameters. For this study, the “Build-out” scenario is assumed to consist of all land development that has been identified or discussed in some form within each city’s planning department. The exact timing of these developments is unknown,

especially under the current economic times. However, for estimating the transportation development fee, it is assumed that all identified development would be fully completed. This section provides an overview of the key demographic assumptions used for the study.

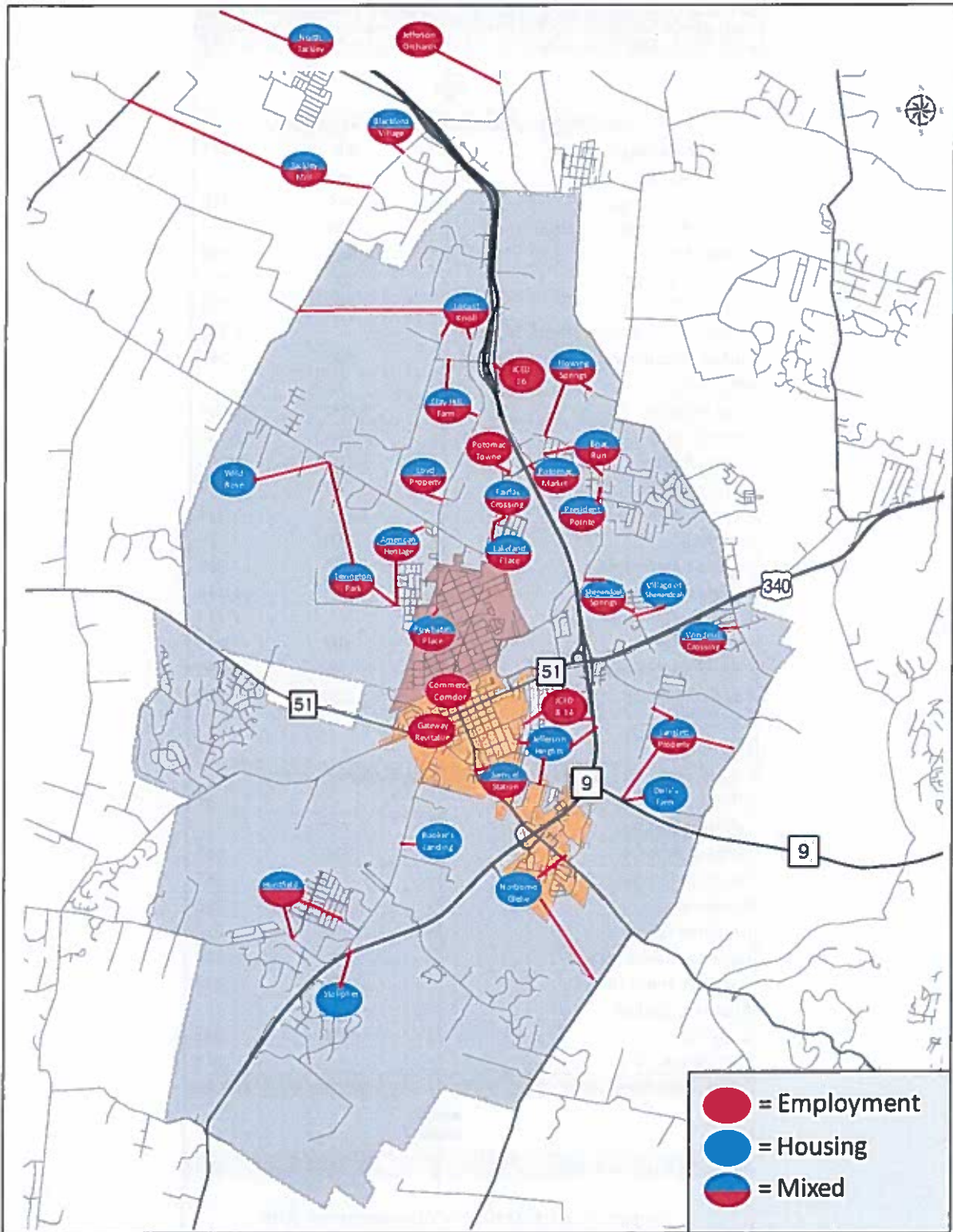
GROWTH ASSUMPTIONS FOR RANSON AND CHARLES TOWN

The consultant team worked closely with Ranson and Charles Town planning staff to review and identify potential developments in the study area. This included input from the Jefferson County Development Authority (JCDA) on potential commercial developments in the region. Exhibit 2.1 summarizes key development locations that have been identified and included in this fee study. For the “Build-out” scenario, it was assumed that all of these developments would be completed. A 2010 base year analysis was estimated to allow for computations of new growth added to the region. The 2010 base year used the demographic assumptions developed for the HEPMPO LRTP, *Direction 2035*. Some adjustments were made to these assumptions based on recently completed developments.

For each of the identified developments, available information was collected on zoning density categories, potential splits between residential and commercial uses, and the approximate number of dwelling units and commercial square footage. These numbers were in-turn used to estimate the demographic input variables to the regional travel model (households, retail employment, service employment, other employment) using available conversion rates from national and local sources. Exhibit 2.2 summarizes the demographic inputs to the travel model for each identified development. In total, over 22,000 households and 28,000 employees were added as part of the “Build-out” scenario. These assumptions were used to estimate potential transportation needs over the long-term and to estimate a per trip fee cost.



Exhibit 2.1: Identified Future Development in Ranson and Charles Town



* JCED refers to commercial lot sites obtained from Jefferson County Economic Development (now JCDA)
** Red lines indicate assumed development loading points onto the transportation network

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Exhibit 2.2: Development Assumptions on Households and Employment

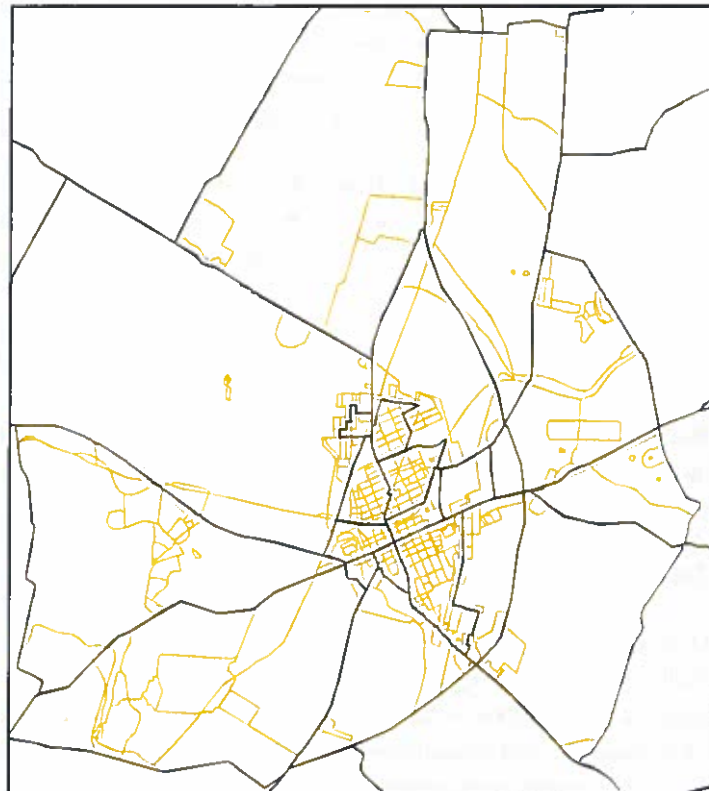
Scenario	Households	Employment
2010 Travel Model Base Year	8,647	15,015
+		
RANSON Assumed Build-Out Growth		
American Heritage	655	444
Flowing Springs	597	8
Shenandoah Springs	434	218
Village of Shendoah Springs	296	-
Tackley Mill	1,861	182
Blackford Village	500	891
Tackley Mill North	390	1,782
Fairfax Crossing West (North Section)	-	1,193
Fairfax Crossing West (South Section)	800	547
Wild Rose	25	-
Lloyd Property	1,800	1,004
Clay Hill Farm	656	2,786
Lexington Park	3,106	2,510
Lakeland Place	510	88
Presidents Pointe	1,031	284
Briar Run	260	19
Potomac Marketplace	1,774	905
Potomac Town Center	-	1,360
Jefferson Orchards	-	7,722
Locust Knoll	197	936
Commerce Corridor	26	1,091
Powhatan Place	120	100
JCED - Sites 1-7	-	-
JCED Site 16	-	87
Charles Town Assumed Build-Out Growth		
Village of Samuel Station	5	18
Jefferson Heights	227	-
Langlett Property	950	665
Windmill Crossing	66	665
Huntfield	3,200	190
Norborne Glebe	1,000	612
Gateway Revitalization	-	500
Stolipher annexation	1,100	673
Booker's Landing	82	-
Daily Farm	890	545
JCED Site 8-14	-	901
Total Added Build-Out	22,558	28,927
=		
Forecast Build-Out Year	31,205	43,942
<i>Comparison to HEPMPO LRTP Assumptions For 2035</i>		
<i>2035 LRTP Assumed Forecast</i>	<i>16198</i>	<i>23483</i>
<i>Avg Annual Growth from 2010</i>	<i>3%</i>	<i>2%</i>

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Each development was associated with a traffic analysis zone in the transportation model. The original HEPMPO travel model has a coarse zone system in the Ranson and Charles Town area that makes it difficult to code existing and future demographic information and represent its potential loading points to the highway network. As a result, the travel model zone system was enhanced for this study. This included sub-dividing traffic zones and revising loading points as illustrated in Exhibit 2.3. The disaggregation of zones were in most cases consistent with CENSUS Block-Level boundaries, allowing for the use of CENSUS data to assist in demographic allocation for existing land use. Additional model improvements to enhance capacity and congestion analyses in the study area are discussed in Section 3.

Exhibit 2.3: Enhancements to Existing Model Traffic Zone System



* Black boundaries illustrate the original HEPMPO zones, Orange boundaries represent new zone system

GROWTH ASSUMPTIONS FOR AREAS OUTSIDE OF RANSON AND CHARLES TOWN

The development of a “Build-out” scenario was focused on the Ranson and Charles Town urban growth boundary. However, the study area is significantly impacted by travel from those outside the region including high levels of through traffic on the Route 340 and Route 9 corridors.

To reflect the potential growth of these external influences, the HEPMPO LRTP 2035 demographic forecasts were used for all areas outside of the study area. These forecasts were developed through a “top-down” approach and discussions with key stakeholders involved in the long range planning process for the MPO.

SECTION 3: CONGESTION ANALYSIS



The congestion analysis was used to identify transportation needs, which were then used by project stakeholders to determine transportation projects within the region. The congestion analyses were also used to develop existing and future performance measures that were used in the development of the fee structure. This included the estimation of project costs attributable to future development, which accounted for existing congestion levels and the impacts of regional through travel on congestion.

The analysis process occurred in several key steps. First, data was collected on the transportation system. This included a roadway inventory to identify the physical characteristics (e.g. lanes, intersection control device, speeds, etc.) of each roadway segment. The WVDOH conducted traffic counts at key locations that assisted in determining existing demand and congestion levels on primary roads.

The HEPMPO regional travel demand model was then updated to improve applicability and performance for this study. These updates included an enhanced roadway network and demographic zone structure as illustrated previously in Exhibit 2.3.

Finally, the travel model was used to estimate future congestion levels based on the forecasted demographic scenario from Section 2. These analyses were integrated with other insights and observations from stakeholders involved in the development of this study. Key roadway corridors were assessed to determine congestion needs and potential projects. This section provides an overview of the data and analysis results.

DATA COLLECTION AND TRAFFIC COUNTS





Roadway and traffic data was collected to support the update of the travel model and congestion analyses. A field inventory was collected of the roadway characteristics. Appendix A provides a summary of the field notes including information on the number of lanes, intersection control devices, intersection turn lanes and observed speed limits. Verifications and adjustments to the data assumptions were also made based on the satellite imagery within the Google Map web system. The data was transferred to the travel model network as attribute variables and was used to estimate congestion measures.

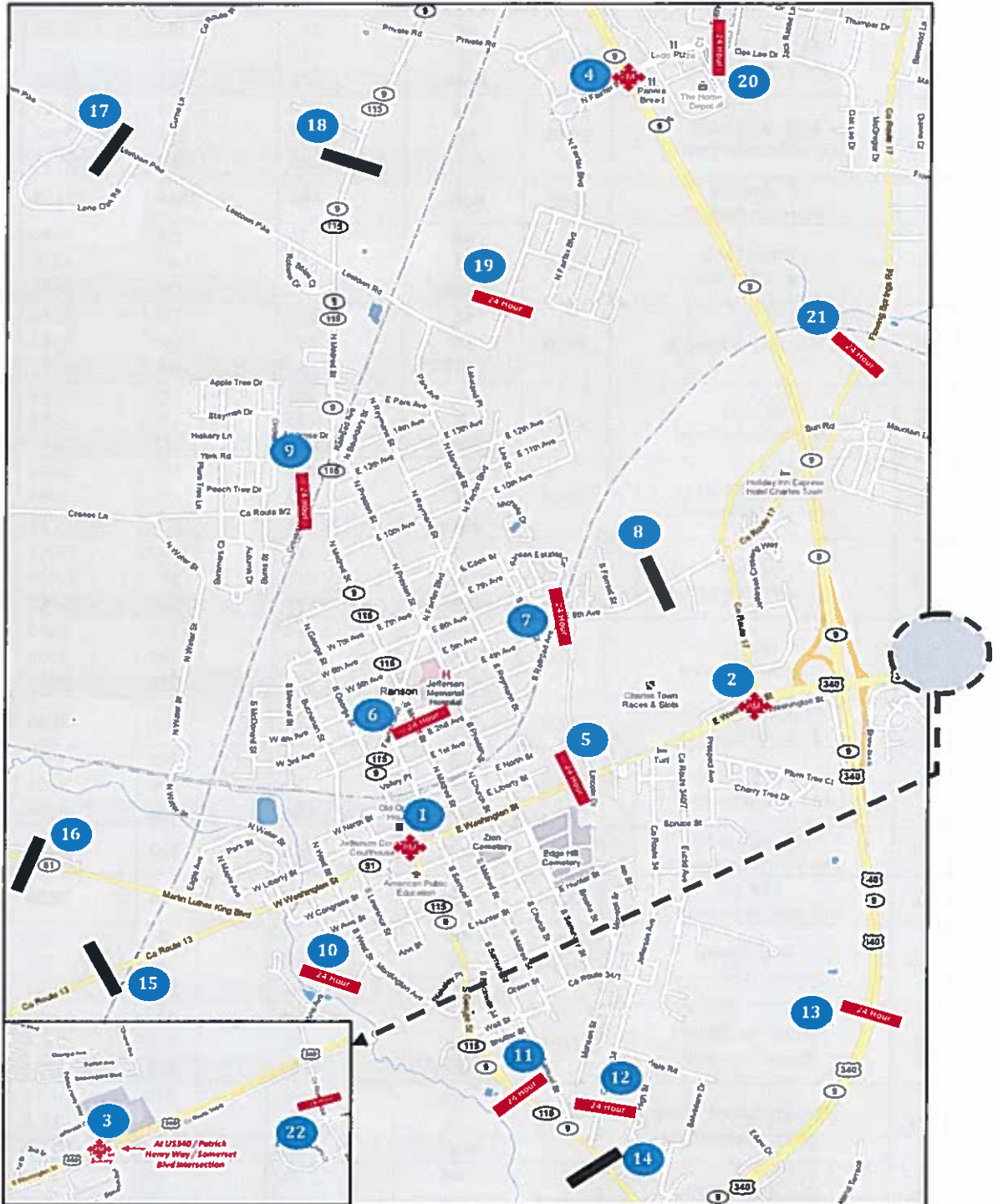
As part of this study, 2008 traffic count data was compiled from WVDOH. In addition, this study included the collection of additional 24-hour tube counts on key roadways in Ranson and Charles Town and four PM peak hour intersection counts at select locations. The counts were completed in October of 2010. The data has been summarized in this section and may serve as a valuable source of information for other traffic studies within the region.

Exhibit 3.1 summarizes the count locations and associated identification (ID) numbers which relate to the traffic count tables that follow. Exhibit 3.2 summarizes the weekday, peak hour and average annual daily (AADT) traffic volumes for locations where 24-hour tube counts were conducted. Exhibit 3.3 summarizes the PM peak hour intersection counts.

Exhibit 3.1: Traffic Count Location Identification Numbers

Legend:

-  = Hourly and Vehicle Class Counts (May-Aug 2008)
-  = 24-Hour Tube Counts (Oct 2010)
-  = PM Peak Intersection Counts (Oct 2010)
-  = ID of Count



Base map from Google Maps

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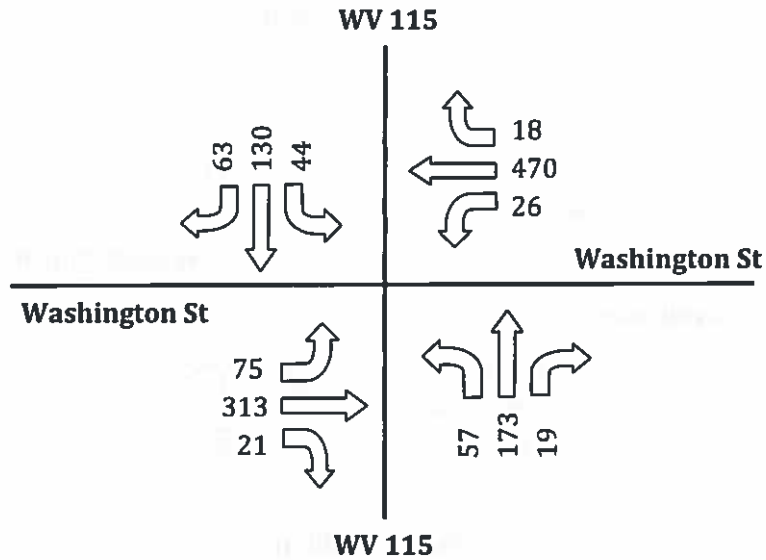
Exhibit 3.2 Traffic Count Volumes for Each Count ID Location

ID	Location	Year Count	Direction	AM Peak Hour	PM Peak Hour	Daily Total	AADT
5	East Washington Street <i>East of Court Street</i>	2010	WB	470	692	8192	
			EB	564	609	8435	
			Both	1034	1301	16627	14087
6	Mildred Street <i>North of 2nd Avenue</i>	2010	NB	121	141	1618	
			SB	120	121	1611	
			Both	241	242	3229	3006
7	East 5th Street <i>East of Railroad Avenue</i>	2010	WB	410	655	7737	
			EB	468	654	7596	
			Both	846	1252	15333	14275
8	5 th Avenue <i>West of Co. Route 17</i>	2008	Both	694	1219	17158	15102
9	Cranes Lane <i>West of WV 115</i>	2010	WB	55	138	1194	
			EB	83	87	1226	
			Both	138	225	2420	2253
10	St. Augustine Avenue	2010	NB	203	220	2110	
			SB	190	189	2162	
			Both	393	409	4272	3619
11	WV 115 <i>North of Samuel Street</i>	2010	NB	222	323	3279	
			SB	232	235	3355	
			Both	424	557	6634	6176
12	Co. Route 34 <i>North of State Route 115</i>	2010	NB	226	279	3240	
			SB	182	272	3496	
			Both	408	515	6736	5958
13	US 340 <i>North of Crescent Drive</i>	2010	NB	787	1039	12054	
			SB	749	935	12429	
			Both	1525	1963	24483	20742
14	WV 15 <i>1 Mi. North of WV 9</i>	2008	NB	286	250	3573	
			SB	207	349	3524	
			Both	453	592	7097	6540
15	County Route 13 <i>3 Mi. West of WV 51</i>	2008	Both	215	301	3588	3106
16	WV 51 East <i>1.4 Mi. West of Co. Route 13</i>	2008	EB	520	271	4901	
			WB	185	606	4963	
			Both	654	860	9864	9090
17	Co. Route 15 <i>1 Mi. West of Co. Route 9/1</i>	2008	Both	288	410	4781	4033
18	WV 115 <i>1 Mi. North of Co. Route 15</i>	2008	Both	405	504	5656	5032
19	Foal Street <i>South of 18th Avenue</i>	2010	NB	55	90	958	
			SB	48	87	893	
			Both	90	177	1851	1723
20	Oak Lee Drive <i>West of Peter Rabbit</i>	2010	WB	105	135	1587	
			EB	51	173	1624	
			Both	155	303	3211	2989
21	Flowing Spring Road <i>South of Grayrack Road</i>	2010	NB	193	340	3519	
			SB	269	335	3656	
			Both	423	594	7175	6346
22	Co. Route 340/4 <i>North of Pleasant Valley Dr.</i>	2010	NB	55	56	638	
			SB	17	80	512	
			Both	72	136	1150	1017

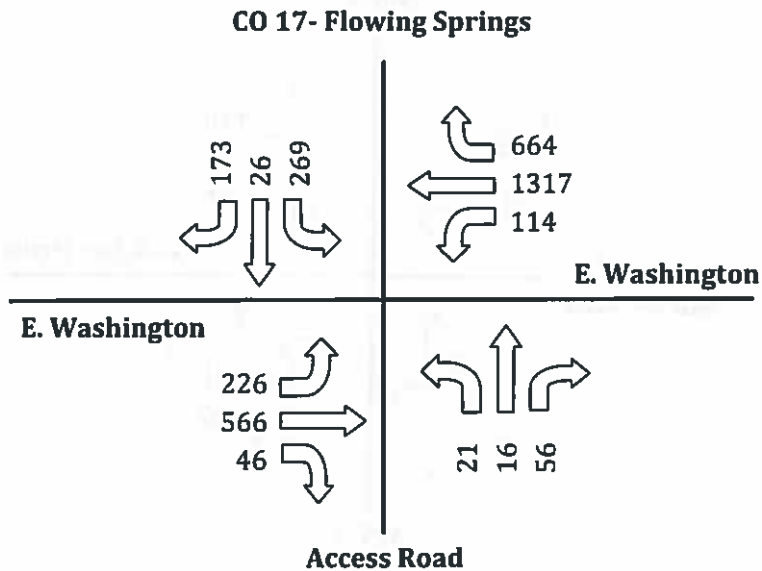


Exhibit 3.3 October 2010 PM Peak (5-6PM) Intersection Counts

Intersection ID = 1: WV 115 & Washington Street



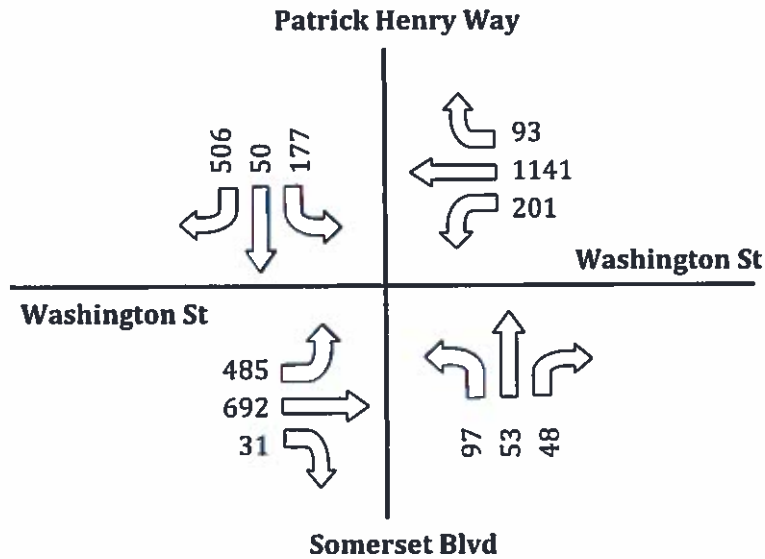
Intersection ID = 2: East Washington Street & County Route 17



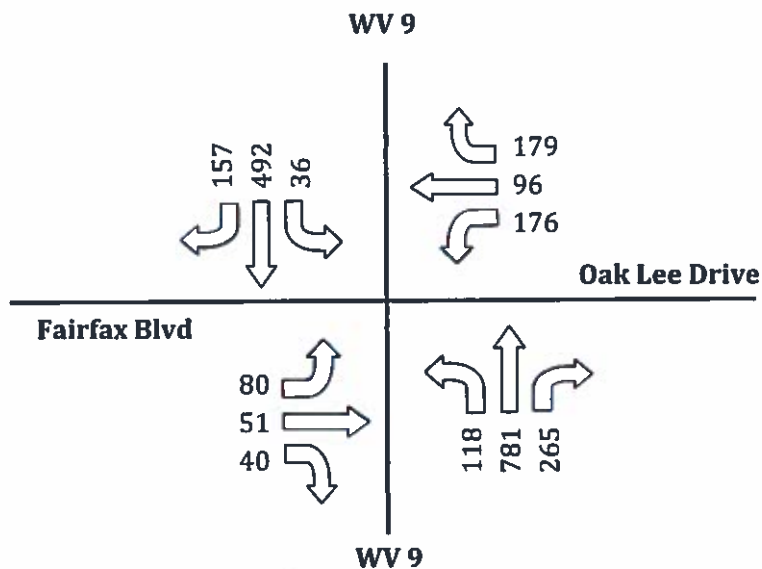
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Exhibit 3.3 (continued) October 2010 PM Peak (5-6PM) Intersection Counts

Intersection ID = 3: US340 & Patrick Henry Way



Intersection ID = 4: WV 9 & Fairfax Boulevard



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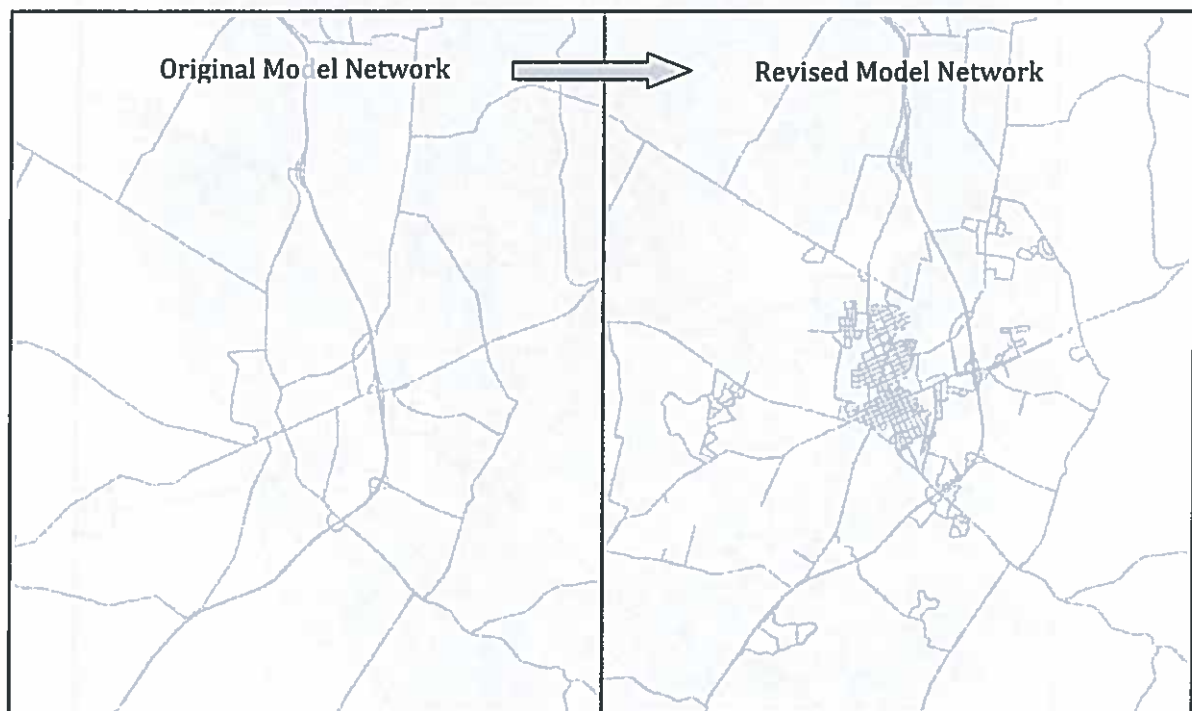


TRAVEL MODEL UPDATE

To complement qualitative observations and insights on congestion, this study utilized technical analyses to estimate future traffic volumes and potential areas of congestion. The HEPMPO regional travel demand model served as the key tool to conduct the analyses. The current version of the travel demand model was developed primarily for regional analyses and has some important limitations when utilized for local studies. These include a coarse zone structure, limited roadway network coverage, and a lack of specific intersection control representation. As a result, for this study the following modifications were made to the regional travel model:

1. Enhanced the regional traffic model traffic analysis zones (TAZs) in the Ranson and Charles Town area. Within the Ranson and Charles Town study area, the TAZs were disaggregated to the CENSUS Block-Level. This modification was illustrated previously in Section 2.
2. Enhanced the regional model roadway network to include additional Ranson and Charles Town local and collector roads. Exhibit 3.4 illustrates the revised network in comparison to the original HEPMPO model network. Roadway characteristics were determined from the roadway data inventory collected for this study.
3. Enhanced the capacity calculation process for roadways within the study area based on available signal information collected in the roadway inventory.

Exhibit 3.4 Revisions to the HEPMPO Travel Model Network

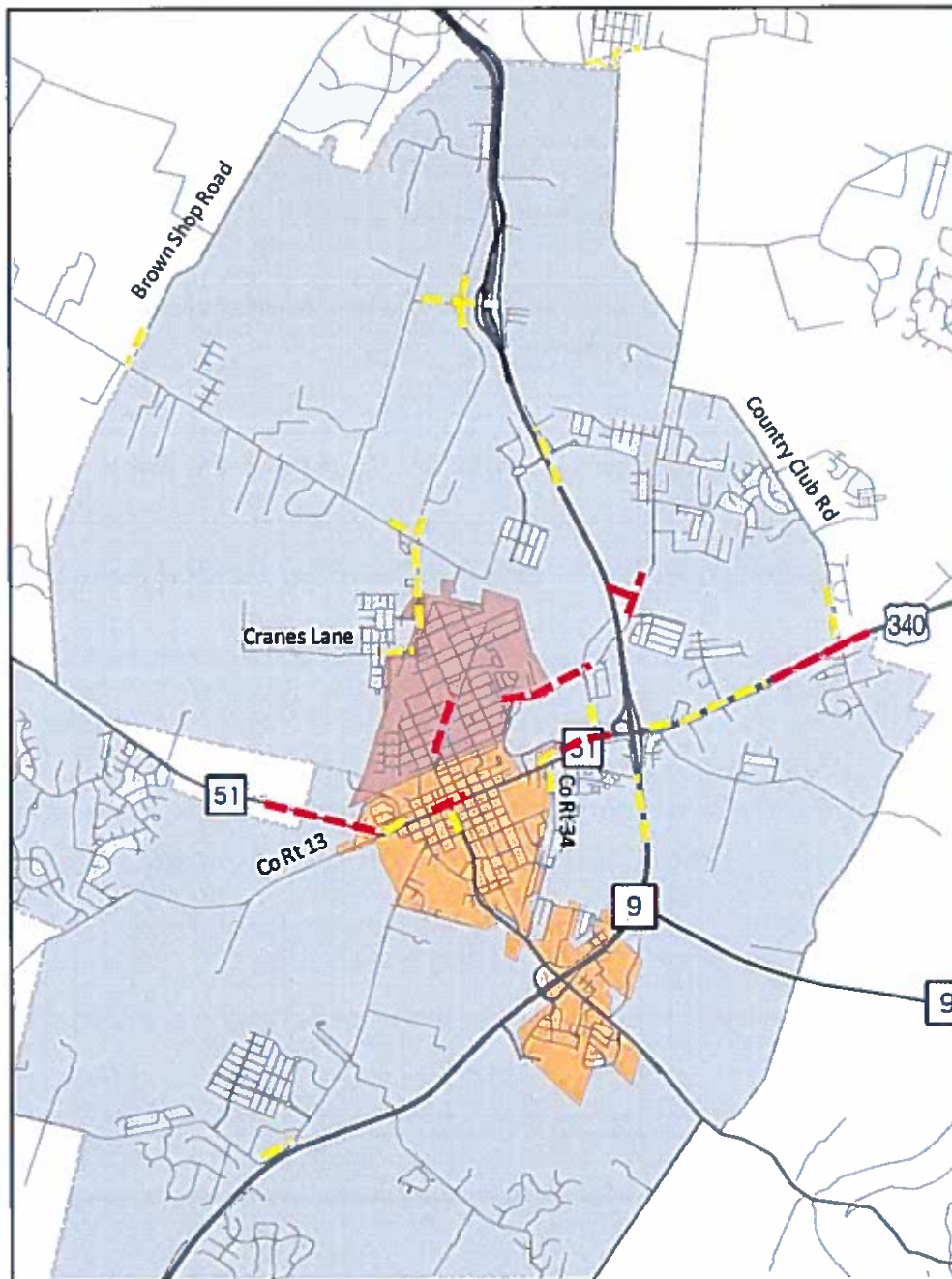


ANALYSIS RESULTS

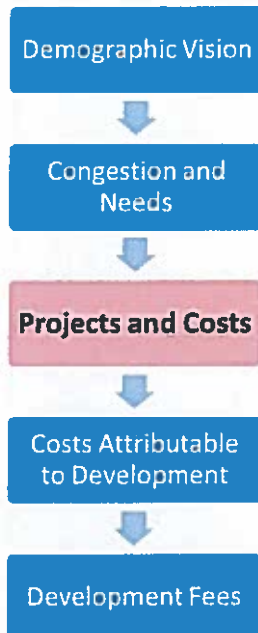
The travel model was used in combination with qualitative input from project stakeholders to develop current and future congested locations. Appendix B provides a summary assessment and performance measures for 23 defined corridors in the region. These results have been summarized in Exhibit 3.5 indicating locations of congestion. The results were used to identify projects and to allocate project costs to new development as described in the following sections.

Exhibit 3.5 Congested Locations

(Red = Current and Future Congestion, Yellow = Future Congestion)



SECTION 4: IDENTIFIED TRANSPORTATION PROJECTS AND COSTS



The identification of transportation projects is an important step in estimating potential funding that may be needed to address long range transportation congestion and needs as documented in previous sections. These funding estimates are used as a basis to determine the transportation development fee.

To address forecast regional congestion, project stakeholders including city, county, MPO and WVDOH staff worked to identify future multi-modal transportation capacity and enhancement projects within the Ranson and Charles Town urban growth boundary. This included projects that had been identified and included in the HEPMPO LRTP (*Direction 2035*), both in the financially constrained and unconstrained portions of that plan. Additional projects and studies were also identified based on the needs summarized within this study and recommendations from the consultant team.

Exhibit 4.1 illustrates the locations of the identified projects, and Exhibit 4.2 provides a short description of each project. These projects have only been identified in a preliminary nature. Thus, specific right-of-way, engineering, and environmental issues have not been assessed in detail. As a result, some of these projects may not end up being programmed or funded but have been included here to assist in estimating reasonable fees, to illustrate future needs, and to initiate further discussion and studies for each project. It is the hope of both cities that this report and the projects included are not only used for fee development but also used as a long term plan for identifying key needs and evaluating alternative options to improve the transportation infrastructure.

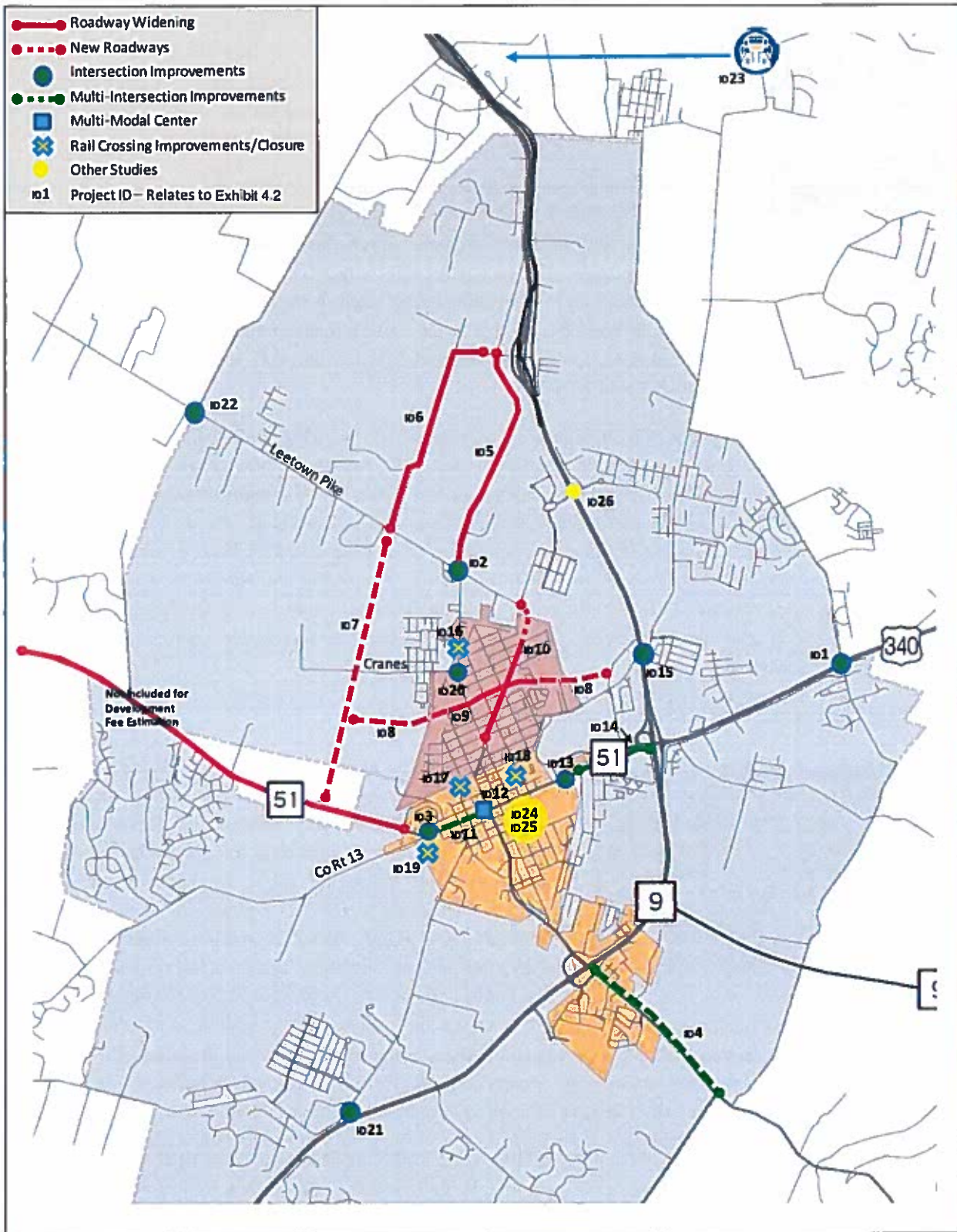
INCLUDING "COMPLETE STREETS" CONCEPTS



Through this study and future planning efforts, Ranson and Charles Town will strive to ensure that future transportation project designs include the concept of *Complete Streets*. *Complete Streets* are important in helping town centers and Main Streets thrive by improving street connectivity and allowing everyone, whether on foot, bike, or public transportation, to reach community focal points. The construction or widening of streets that function as state highways takes its toll on pedestrian safety and can have a negative impact on small-town economies. In these cases, *Complete Streets* policies at the state and local level help communicate the community's vision and ensure safe, accessible, and attractive streets. Creating complete streets can facilitate reinvestment and economic development in the heart of a small town. Appendix C provides a summary of Complete Streets concepts from the National Complete Streets Coalition. In addition, Exhibit 4.3 provides an example of *Complete Streets* policy requirements.

The *Complete Streets* concepts have been stressed for each of the improvements identified in the Ranson and Charles Town region. These concepts are also applied to the cost estimates for each project as discussed in the following sections.

Exhibit 4.1: Summary of Identified Project Locations



Since the majority of WV51 widening is outside of the Study Area, the project is not included in the Development Fee assessment.



Exhibit 4.2: Summary of Identified Project Descriptions

ID	Project Name	Project Description	In HEPMPO LRTP	
			Financially Constrained	Not Financially Constrained
1	US 340 & Country Club Rd.	Convert at-grade intersection to a grade separated interchange.	X	
2	Mildred St. & Leetown Pike	Install a traffic control roundabout at intersection to improve operations and alignment.	X	
3	WV51 & Summit Point Rd.	Improve intersection where WV51 intersects West Washington St. and Summit Point Rd. Possible addition of a traffic circle.	X	
4	Old Rt. 9: Access Management	Intersection improvements along 4.2 mile segment of old WV9 between Mission Rd. and US340.	X	
5	Mildred St. Widening	Widening to 4 lanes between Currie Lane and Leetown Pike.		X
6	Currie Lane Widening	Widen Currie Lane to 4 lanes with pedestrian amenities between Route 9 and Leetown Pike		X
7	Currie Lane Extension	Extend Currie Lane (possibly as 4-lane roadway) from Leetown Pike to WV51.		X
8	Beltline Extension	Extend Beltline Ave from Currie Lane to possible junction with 5 th Ave. or Sun Rd. Requires multiple rail crossings.		X
9	Beltline Widening	Widen and improve the existing portion of Beltline Ave.		X
10	Fairfax Blvd. Widening	Widen Fairfax Blvd. to 4 lanes with pedestrian amenities between Lancaster Circle to connection with Leetown Rd.		X
11	Traffic Safety and Pedestrian Mobility	Includes improvements referenced above for WV51 and Summit Point Rd. plus additional improvements along West Washington St. including pedestrian improvements.		
12	Charles Washington Hall Facility	Improvements to the multi-modal center including bike facilities, waiting areas, curb extensions, signage and additional amenities.		
13	Co.34 & Washington St.	Intersection improvements to address future congestion and possible deficient intersection operations.		
14	East Washington St. Intersection Improvements	General line item for intersection improvements from Co.34 to Route 9. Project may consist of signal timing improvements and possible turning lanes.		
15	Sun Rd. / Route 9	Intersection improvements with Sun Rd. / Route 9 / Flowing Springs Rd. Includes improved length of accelerations from Sun Rd. onto Route 9 (N and S).		
16	Mildred St. / NS Rail Crossing	Provide grade separated crossing of Norfolk Sothern tracks for Mildred St.		
17	Lawrence St. / CSX Rail Crossing	Signal upgrade or elimination of rail crossing for safety purposes.		
18	Church St. / CSX Rail Crossing	Elimination of rail crossing for safety purposes.		
19	Co. Rt. 13 Rail Crossing Consolidation	Consolidate County Rt. 13 crossing with WV51 crossing of Norfolk Southern rail line.		
20	Cranes Lane & Mildred St.	Improvements to the intersection to address sight distance and capacity issues.		
21	Huyett Road & Augustine Ave.	Intersection improvements to address future increase in traffic volumes at intersection.		

Continued on Following Page

Exhibit 4.2: Summary of Identified Project Descriptions (continued)

ID	Project Name	Project Description	In HEPMPO L RTP	
			Financially Constrained	Not Financially Constrained
22	Brown Shop Rd. & Leetown Pike	Intersection improvements to address future increase in traffic volumes at intersection.		
23	MARC Train Station Relocation	Relocated Duffields train station to Jefferson Orchards development to improve regional access and promote transit-oriented development.		
24	Old Town Local Street Enhancements	General improvements to downtown streets to promote better vehicle and pedestrian mobility and improve streetscape.		
25	Trail and Sidewalk Connection Study	Study improvements to city trails and sidewalks. Address connectivity to Route 340 trail enhancements (not currently defined).		
26	Route 9 & Fairfax Blvd. Study	Study alternatives to intersection design and control to address forecast increases in traffic volumes and potential congestion.		

Exhibit 4.3: Example Complete Streets Policy

- Every project shall use the most appropriate design standards and procedures. Designs shall include accommodations of all users and be context-sensitive.
- A systems approach shall be used in developing roadway projects, including coordination with nearby jurisdictions, projects, and plans.
- Logical termini shall be chosen to include connections through “pinch points.”
- The project shall provide the opportunity for nearby destination points to have access to pedestrians and bicycle facilities.
- Every project shall involve the local transit agency in the design process to ensure sufficient accommodation to transit vehicles and access to transit facilities. Public transit facilities shall be designed with the goals of Complete Streets in mind.
- Every project shall provide the opportunity for utility/telecommunications infrastructure to be appropriately accommodated to allow for existing/future growth.
- The provision of accommodations for one mode shall not prevent the safe use by another mode.



Mid-Ohio Regional Planning Commission, Complete Streets Fact Sheet, August 2010

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PROJECT PHASING PRIORITY

The development of the transportation fee considers the costs of all transportation needs for an assumed “build-out” scenario. However, the actual implementation and funding of projects will ultimately occur as distinct phases requiring an assessment of the priority of each project. The projects have been categorized into short-term, mid-term and long-term priority levels as defined in Exhibit 4.4

Exhibit 4.4: Project Priority Levels

Priority Level	Description
Short-Term	Projects that address current mobility, congestion and safety deficiencies that are expected to worsen significantly with future development.
Mid-Term	Projects needed to address future mobility, congestion and safety deficiencies that may occur before full “build-out” conditions are reached.
Potential Long-Term	Potential longer term mobility and congestion needs related to full “build-out” conditions; Will need to be re-evaluated in future plans.

Exhibit 4.5 provides an initial assessment of project priorities. This initial assessment has been based on the following:

- Current congestion and safety concerns
- Projected congestion levels
- Previous efforts in project planning or identification
- Economic development issues

As discussed in previous sections, congestion performance measures have been produced based on current and future projections of regional household and employment. Projects that address corridors that are currently congested have been considered short-term priorities. These include projects that are currently identified on the HEPMPO LRTP including those that improve traffic flow on Route 51, Route 340, Mildred Street and Old Route 9. Likewise, other proposed projects focus on addressing existing vehicle or pedestrian safety; and, these too are considered short-term priorities. These include the Charles Town Traffic Safety and Pedestrian Study and improvements to rail crossings within the city limits. Other short-term priority projects include the Charles–Washington Multi-Modal Facility that provides improved transit service and opportunities for economic development within the city.

Mid-term and long-term project priorities are focused on addressing future congestion problems that have been projected using regional analysis tools. These projects have been identified but may require additional review and stakeholder involvement to better define potential alternatives and to address key right-of-way and design considerations.

Exhibit 4.5: Initial Assessment of Project Priorities

Short - Term	Mid - Term	Potential Long - Term
<ul style="list-style-type: none"> • ID1: US 340 & Country Club Road • ID2: Mildred Street & Leetown Pike • ID3: WV51 & Summit Point Road • ID 4: Old Rt 9 Access Management • ID 8/9: Beltline Ave East Extension and Widening • ID 11: Traffic Safety and Pedestrian Mobility • ID 12: Charles Washington Hall Multi-modal Facility • ID17: Lawrence Street Rail Crossing • ID18: Church Street Rail Crossing 	<ul style="list-style-type: none"> • ID5: Mildred Street Widening • ID 10: Fairfax Boulevard Widening • ID15: Sun Road / Route 9 Improvements • ID16: Mildred Street Rail Crossing • ID20: Cranes Lane and Mildred Street • ID24: Old Town Local Street Enhancements • ID25: Trail and Sidewalk Connection Study 	<ul style="list-style-type: none"> • ID6: Currie Lane Widening • ID7: Currie Lane Extension • ID8: Beltline Extension West • ID13: CO34 & Washington Street • ID14: East Washington Street Improvements • ID19: CO13 Rail Crossing Consolidation • ID21: Huyett Road & Augustine Ave • ID22: Brown Shop Road & Leetown Pike • ID23: MARC Train Station Relocation • ID26: Route 9 & Fairfax Blvd. Study

ROADWAY OWNERSHIP/MAINTENANCE RESPONSIBILITIES

The West Virginia Division of Highways (WVDOH) is responsible for planning, engineering, right-of-way acquisition, construction, reconstruction, traffic regulation and maintenance of more than 34,000 miles of roads within the state. These include interstate routes, US routes, WV Routes and County Routes. Exhibit 4.6 illustrates the current roadways maintained by WVDOH within the study area.

Several of the proposed improvements involve roadways not covered under the current state system. These include the Fairfax Boulevard, Beltline Road, and Currie Road widening and extension projects. Each of these projects focus on providing future congestion relief to current state maintained routes; and may warrant future consideration for inclusion as part of the state roadway system.

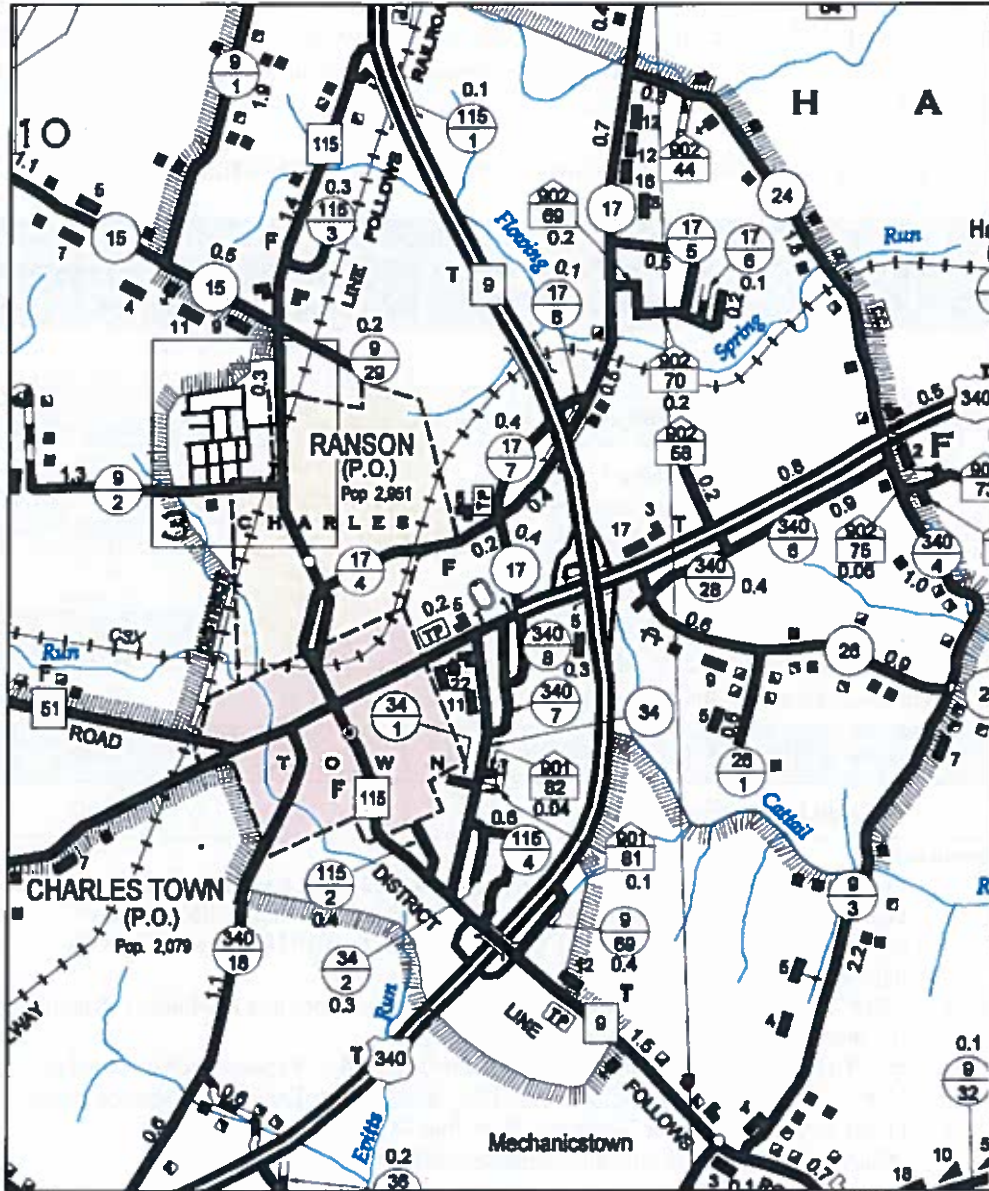
As illustrated previously in Exhibit 3.5, traffic along Mildred Street, Washington Street and 5th Avenue are projected to exceed acceptable level-of-service standards based on forecast housing and employment development in the region over the next 20 years. However, there are significant constraints that prevent widening existing state maintained roadways. These include abutting businesses, lack of right-of-way (ROW), and rail crossings (e.g. Mildred Street - Norfolk Southern crossing). In addition, continued widening of downtown streets does not fit into the Complete Streets vision. As a result, alternative options and new roadway routes allow for congestion relief and Complete Streets design options to improve traffic operations and provide a unique city environment to promote future economic development. Both Ranson and Charles

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Town will continue to work with WVDOH in reviewing project alternatives and whether the transfer of certain city streets to the WVDOH roadway system is justified and beneficial.

Exhibit 4.6: WVDOT State Maintained Roadways



General Highway Map: Jefferson County Sheet 2, 2011 West Virginia Department of Transportation

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PROJECT COSTING ESTIMATES

To assist in the calculation of a transportation development fee, an estimated total cost is needed for each project. Estimating project costs can be difficult since environmental and engineering efforts have not been completed for most long range vision projects, many being conceptual in nature. For this study, cost estimates have relied on values prepared for the HEPMPO LRTP and a review of national research to determine average costs per mile for different project types. Exhibit 4.8 summarizes the unit costs for roadway improvements assumed for this study. Included in the exhibit are key resources used to determine these estimates.

Exhibit 4.8: Assumed Unit Costs by Project Type (2010 Million US \$)

Project Type	Undivided Highways	
	Built-Up Area	Outlying Area
Right-of-Way (ROW) Acquisition	0.65 <i>(Per Lane Mile)</i>	0.26 <i>(Per Lane Mile)</i>
New Construction (New Road)	2.60 <i>(Per Lane Mile)</i>	2.19 <i>(Per Lane Mile)</i>
Reconstruction With New Lanes	3.26 <i>(Per Lane Mile)</i>	2.45 <i>(Per Lane Mile)</i>
Interchange	30.00	24.00
Sidewalk / Pedestrian Improvements	0.20 <i>(Per Mile)</i>	0.15 <i>(Per Mile)</i>
Trail Development	0.29 <i>(Per Mile)</i>	0.29 <i>(Per Mile)</i>
Intersection Signalization / Rail Crossing Improvements	0.36	0.25
Intersection Reconfiguration and Design	2.50	1.60
Add Intersection Turn Lanes	0.35	0.30
Resources:		
<ul style="list-style-type: none"> Victoria Transport Policy Institute, Transportation Cost and Benefit Analysis Techniques, Estimates and Implications [Second Edition], Chapter 5.6 Roadway Facility Costs, March 2011. Table 5.6.3-4 Adjusted to 2010 US dollars using CPI. (http://www.vtppi.org/tca/) VDOT Statewide Planning Level Cost Estimates, Transportation & Mobility Planning Division, January 2009. FDOT Generic Cost Per Mile Models (Updated annually). Version Used obtained in March of 2011. (http://www2.dot.state.fl.us/SpecificationsEstimates/costpermile.aspx) FDOT Roadway Cost Per Centerline Mile, June 2010 (http://www.dot.state.fl.us/planning/policy/costs/costs-D7.pdf) 		

For projects contained in the financially constrained portion of the HEPMPO LRTP (e.g. project ID1-4), the LRTP project costs are used as the estimates for this study with one key adjustment. For the LRTP, a significant portion of ROW costs were built into each total project cost as a conservative estimate. Based on the review conducted for this study, it was determined that these ROW costs were excessive for these four projects. As a result, the LRTP estimates were adjusted to remove the ROW costs. The remaining project costs were estimated using Exhibit 4.8 with some specific adjustments per individual project scopes. Exhibit 4.9 summarizes the individual project costs and total estimated cost for all regional projects.



Exhibit 4.9: Estimated Project Costs (2010 Million US \$)

ID	Project Name	Notes	Cost
1	US 340 & Country Club Rd.	Cost Per HEPMPO LRTP	23.8
2	Mildred St. & Leetown Pike	Cost Per HEPMPO LRTP	3.9
3	WV51 & Summit Point Rd.	Cost Per HEPMPO LRTP	6.3
4	Old Rt. 9: Access Management	Cost Per HEPMPO LRTP	1.5
5	Mildred St. Widening	Per Exhibit 4.7: 1.5 mi length of 4 lane reconstruction and widening + Complete Streets	16.9
6	Currie Lane Widening	Per Exhibit 4.7 – 1.5 mi length of 4 lane reconstruction and widening + Complete Streets	16.9
7	Currie Lane Extension	Per Exhibit 4.7: 1.5 mi length of 4 lane new construction + ROW acquisition + Complete Streets	16.7
8	Beltline Extension	Per Exhibit 4.7: 1.2 mi length of 4 lane new construction + ROW acquisition + Complete Streets	13.3
9	Beltline Widening	Per Exhibit 4.7: 0.5 mi length of 4 lane reconstruction and widening + Complete Streets	5.6
10	Fairfax Blvd. Widening	Per Exhibit 4.7: 1.2 mi length of 4 lane reconstruction and widening + Complete Streets	13.5
11	Safety & Pedestrian Mobility	Charles Town Estimate – Reduced due to overlap with ID3	0.7
12	Charles-Washington Hall	Charles Town Estimate	3.0
13	Co. 34 & Washington St.	Per Exhibit 4.7: Intersection reconfiguration + 50% increase due to utility relocation needs	3.8
14	East Washington St. Intersections	Per Exhibit 4.7: Assume 2 intersection reconfigurations	5.0
15	Sun Rd. / Route 9	Per Exhibit 4.7: Extension of acceleration lane – assume 0.25mi new construction + Intersection reconfiguration	2.2
16	Mildred St. / NS Rail Crossing	Per Exhibit 4.7: Due to significant efforts to go over rail lines, assume 50% of interchange	12.0
17	Lawrence St./CSX Rail Crossing	Per Exhibit 4.7: Assume reconfiguration or possible signalization	0.4
18	Church St./CSX Rail Crossing	Per Exhibit 4.7: Assume closure requires intersection modifications	0.3
19	Co. Rt. 13 Rail Crossing	Per Exhibit 4.7: Assumes diversion of traffic and possible construction of new 2 lane roadway (0.1 mi)	0.5
20	Cranes Lane & Mildred St.	Per Exhibit 4.7: Intersection reconfiguration to improve sight distance	2.5
21	Huyett Road & Augustine Ave.	Per Exhibit 4.7: Possible intersection signalization	0.3
22	Brown Shop Rd. & Leetown Pike	Per Exhibit 4.7: Additional	0.3
23	MARC Train Station Relocation	Per offline assessment including construction of parking lot and loading platform.	15.0
24	Old Town Street Enhancements	Per Exhibit 4.7: Assume 2.3 miles of pedestrian and sidewalk improvements + Additional 50% for other beautification items.	0.7
25	Trail and Sidewalk Improvements	Assume 200k study + 2 miles of trail development	0.8
26	Route 9 & Fairfax Blvd. Study	Assume 200k study	0.2
TOTAL			166.1

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Some projects required specific assessments to determine costs. For new construction and existing reconstruction projects, the Complete Streets design concepts have been stressed in this study and in the project definitions. As indicated in Complete Streets research, careful planning can lead to the inclusion of effective measures at little or no extra cost and eliminate the need for costly retrofits. Some agencies (e.g. Mid-Ohio Planning Commission) have capped the costs of Complete Streets efforts to no more than 15% of the existing project cost. The assumption used for this study follows a similar approach and assumes that projects with Complete Streets concepts will include a 15% increase in cost. This does not apply to the Old Town Street Enhancements project, which may include these concepts as its core goal. This project was estimated using the typical costs for sidewalk and pedestrian improvements with some additional dollars added for landscaping and other city street beautification efforts.

The Duffields MARC train station project has been identified and includes relocation of the current station closer to Route 9. This project would allow for better regional access and support transit-oriented development. The project costs have been estimated assuming the station would be comparable to that at the current location, which consists of a parking lot and a platform for passenger loading. Estimates were developed based on consultant experience in project costs of similar train stations. The costs do not include the construction of station buildings if they should be deemed to be included in the project scope.



Photo from Google Maps

A Trail and Sidewalk Improvement Study and the Route 9 & Fairfax Boulevard Intersection Study have been estimated to be 200,000 dollars each. This represents an average cost for studies that include some assessment of alternatives. The trail study will be conducted in close coordination with other county trail plans along the Route 340 corridor and will aim to improve connectivity between the City of Ranson / Charles Town and other areas within the County. Included in the Trail and Sidewalk Improvement project are the costs associated with the construction of 2 miles of trails.

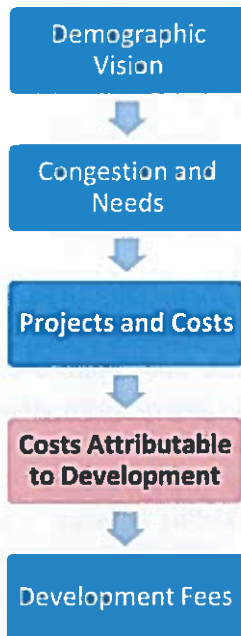
A total of 166.1 million dollars of transportation projects have been identified based on current and projected needs within the region. Exhibit 4.10 provides a breakout of the costs by the assumed project priority types.

Exhibit 4.10: Estimated Project Costs by Priority Level

Priority Level	Project Cost Totals
Short-Term	\$52.2 million
Mid-Term	\$48.6 million
Potential Long-Term	\$65.3 million
Total	\$166.1 million



SECTION 5: COSTS ATTRIBUTABLE TO DEVELOPMENT



This section focuses on the development of a cost per trip end for projected new development within the Ranson and Charles Town urban growth boundary. Over 166 million dollars of transportation improvements have been identified in Section 4; however, future development should not bear the burden of all of these costs. This section focuses on determining a project cost attributable to future development and addresses adjustments related to the following key factors:

- Applying project costs for short and mid-term projects only
- Reducing future development costs for projects already on LRTP
- Addressing existing roadway traffic congestion
- Addressing travel passing through the study area

Twenty six projects have been identified in the region, and they have been classified into three priority levels, short term, mid-term and potential long-term. It has been determined that the current development fee structure will only focus on costs related to short and mid-term projects. The long-term projects are focused on future congestion needs dependent on full “build-out” conditions and will need to be re-evaluated as part of future planning efforts.

Four of the short-term projects are identified on the financially constrained portion of the HEPMPO LRTP. For these projects, it has been assumed that future development costs would only be based on the 20% state and local match, rather than the total project cost.

Current traffic congestion provides the impetus for several of the identified projects. These projects are most likely the responsibility of existing development and roadway users. In addition, trips traveling through the Ranson and Charles Town urban growth area have a key impact on traffic congestion, especially on the Route 340 and Route 9 corridors. Similar to issues with current congestion, future development should not be solely responsible for congestion due to the traffic of those traveling through the region. This study presents an analytical approach to develop a percentage adjustment factor that can be applied to the total project funding to determine what portion is potentially attributable to new development within Ranson and Charles Town. This analytical approach uses results from the regional travel demand model and congestion analyses.

PROJECT COSTS ATTRIBUTABLE TO DEVELOPMENT

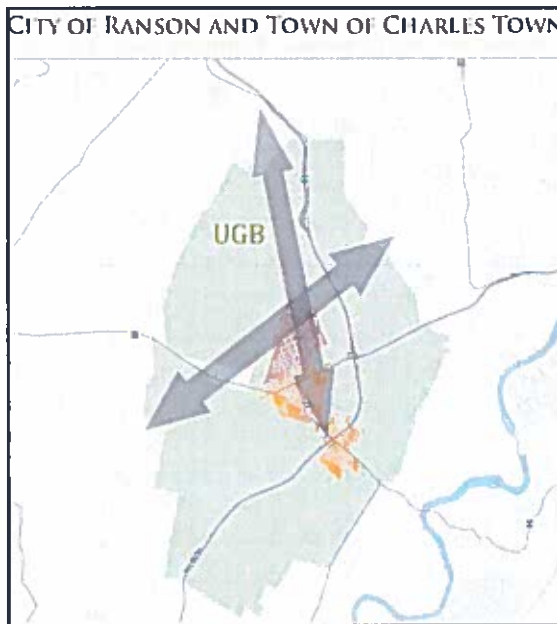
The project costs presented previously in Section 4 have been adjusted to determine what portion is attributable to future development in the project study area. The adjustments to project cost have been determined using outputs from the HEPMPO regional travel model, engineering judgment and other assumptions. Only project costs associated with short and mid-term projects have been included for the fee calculations. As illustrated in Exhibit 5.1, this equates to 100.8 million dollars of transportation projects.

Exhibit 5.1: Projects Costs Included in Fee Calculation

Priority Level	Project Cost Totals	Included for Fee Estimation
Short Term	\$52.2 million	YES
Mid Term	\$48.6 million	YES
Potential Long Term	\$65.3 million	NO
Total Used for Fee Calculation	\$100.8 million	

The travel model and associated congestion analyses were used to determine existing and future 2035 congestion levels and the amount of travel through the study area (e.g. the Ranson and Charles Town urban growth boundary). This includes the quantification of excess demand, which represents the number of vehicles per hour that exceeds the roadway capacity. The estimates of through percentages were conducted at selected locations throughout the study area using the “select link” features of the modeling software (e.g. TransCAD). Through traffic is defined for this study as travel that has both an origin and destination outside the Ranson and Charles Town urban growth boundary (e.g. UGB) as illustrated in Exhibit 5.2.

Exhibit 5.2: Definition of Through Travel for Fee Calculations



Where applicable, the modeling results were adjusted per available traffic counts, congestion observations, and other insights and comments from city staff. The estimates of excess demand and through traffic were used to develop percentage adjustments to project costs as illustrated in the sample calculations shown in Exhibit 5.3.

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Exhibit 5.3: Sample Calculations to Address Existing Congestion and Through Travel

ID	Item	Existing	Build-Out
1	"Acceptable" Capacity	1,120	1,120
2	Volume (Peak Hour)	1,300	1,700
3	Thru Travel %	15%	20%
4	Excess Demand (ID2 - ID1)	180	580
5	Excess Demand: "Thru" Portion (ID4 x ID3)	27	116
6	Excess Demand: Non "Thru" Portion (ID4 - ID5)	153	464
8	Development Portion of Project Costs $((464 - 153) / 580)$	-----	54%

Some projects like the Currie Lane Extension, Fairfax Boulevard and the Beltline Extension are focused on improving congestion on nearby roadways. For these analyses, Fairfax Boulevard uses the congestion and through percentages for vehicles on Mildred Street; and, the Beltline Extension project uses data from 5th Avenue. Currie Lane is expected to provide potential benefits in and around the city; and thus uses the average of costing adjustments calculated from the Fairfax Boulevard and Beltline Extension projects.

Other projects were determined to be more difficult to split between existing and future development. These included the railroad crossing projects for Lawrence, Church and County Route 13; Old Town Street Enhancements; MARC station relocation; Charles Washington multi-modal center, Old Route 9 access management, and the two studies. For these particular projects, it was assumed that existing and future development should share equally in financing this project, thus 50 percent of the project costs were attributed to future development.

Exhibit 5.4 summarizes the percentage calculations and costs attributable to future development in the region. Of the 166.1 million dollars of transportation needs, 57.9 million are used for the fee calculations. The U.S. 340 & Country Club Road and WV 51 & Summit Road projects were reduced by the highest values to account for existing congestion and high through traffic percentages along the Route 51 and Route 340 corridors. Projects with little or no existing congestion and low through traffic percentages were primarily attributed to future development. In addition, the base costs for those projects contained on the HEPMPO fiscally constrained LRTP were reduced to only include to the 20% match from state and local sources. This applies to project IDs 1-4.

Exhibit 5.4: Estimation of Project Costs Attributable To New Development (2010 Million US \$)

ID	Project Name	Estimated Analytic Measures				% of Cost Due to Development	Project Cost	Project Cost Attributable to Development
		Existing Excess Demand	2035 Excess Demand	Existing % Through	2035 % Through			
Short and Mid Term Projects Included in Fee Calculations								
1	US 340 & Country Club Rd.	900	1,620	38%	39%	27 % x .20	23.8	1.29
2	Mildred St. & Leetown Pike	100	700	4%	1%	85 % x .20	3.9	0.66
3	WV51 & Summit Point Rd.	500	800	23%	34%	18 % x .20	6.3	0.23
4	Old Rt. 9: Access Management	-----	-----	-----	-----	50 % x .20	1.5	0.15
5	Mildred St. Widening	-----	750	4%	1%	99 %	16.9	16.73
8	Beltline Extension	150	1080	1%	1%	85 %	6.7	5.65
9	Beltline Widening	150	1080	1%	1%	85 %	5.6	4.76
10	Fairfax Blvd. Widening	100	620	3 %	1 %	83 %	13.5	11.21
11	Safety & Pedestrian Mobility	280	1,090	16%	25%	53 %	0.7	0.37
12	Charles-Washington Hall	Equal split between existing/ new development				50 %	3.0	1.50
15	Sun Rd. / Route 9	50	280	5%	4%	79 %	2.2	1.74
16	Mildred St. / NS Rail Crossing	100	620	3%	1%	83 %	12.0	9.96
17	Lawrence St./CSX Rail Crossing	Equal split between existing/ new development				50 %	0.4	0.20
18	Church St./CSX Rail Crossing	Equal split between existing/ new development				50 %	0.3	0.15
20	Cranes Lane & Mildred St.	0	570	0%	0%	100 %	2.5	2.50
24	Old Town Street Enhancements	Equal split between existing/ new development				50 %	0.7	0.35
25	Trail and Sidewalk Study	Equal split between existing/ new development				50 %	0.8	0.40
TOTAL:							100.8	57.85

Potential Long-Term Projects Not Included in Fee Calculations								
6	Currie Lane Widening	-----	500	0%	0%	100 %	16.9	16.90
7	Currie Lane Extension	Use Average of Fairfax / Beltline				84 %	16.7	14.03
8	Beltline Extension	150	1080	1%	1%	85 %	6.7	5.65
13	Co. 34 & Washington St.	640	1,970	7%	13%	57 %	3.8	2.17
14	East Washington St. Intersections	320	1,790	10%	17%	67 %	5.0	3.35
19	Co. Rt. 13 Rail Crossing	Equal split between existing/ new development				50 %	0.5	0.25
21	Huyett Road & Augustine Ave.	0	640	2%	2%	98 %	0.3	0.29
22	Brown Shop Rd. & Leetown Pike	0	510	2%	1%	99 %	0.3	0.30
23	MARC Train Station Relocation	Equal split between existing/ new development				75 %	15.0	11.25
26	Route 9 & Fairfax Blvd. Study	Equal split between existing/ new development				50 %	0.2	0.10

Notes on Adjustments to Model Outputs:

- Mildred St. & Leetown Pike congestion adjusted upwards to reflect congestion on Leetown Pike approach.
- WV51 existing and future congestion adjusted upwards based on observations and insights from city staff.
- Currie Lane values based on average of conditions along roadway.
- Beltline Widening and Extension projects use info from high congested locations on 5th Avenue
- Fairfax Boulevard uses congestion on Mildred Avenue at 4th Avenue location.
- Adjusted Sun Road intersection to include additional existing congestion



ESTIMATING A COST PER DEVELOPMENT TRIP END

The impact of development on traffic is generally determined according to the number of trip ends produced by a particular land use. Resources like the Institute of Transportation Engineers *Trip Generation Manual* provide estimated trip ends for detailed land use types. Such data will play a key role in developing the fee structure in Section 6.

To support those calculations, a general cost per development trip end has been estimated based on the project costs presented in Exhibit 5.4 and outputs from the HEPMPO regional travel demand model. The HEPMPO regional travel model has been used to estimate the number of trip ends added by new development in the study area between 2010 and the "Build-out" scenario. The model estimates are based on the input demographic forecasts documented in Section 2 and internal model trip rate factors. Trip ends have been estimated for the daily and peak hour conditions (e.g. includes both AM and PM peak hours).

Using the estimated growth in trip ends, a new development cost per trip end can be simply calculated by dividing the total project costs (attributable to development) by the trip end estimates. Exhibit 5.5 summarizes the calculation and resulting values, which serve as a key component to the fee structure.

Exhibit 5.5: Calculation of Cost Per Trip End (2010 US \$)

Category	Change in Trip Ends (2010-2035)	Total Project Costs (Attributable to Development)	Cost Per Trip End
Daily	255,013	57,850,000	\$227
Peak Hour (AM+PM)	48,084	57,850,000	\$1,203

Based on a consultant review of other development and traffic impact fees across the country, the above costs per trip end fall within in the typical ranges. Fees can vary significantly based on each local jurisdiction. In general, a peak hour per trip end cost will be more than a daily value because it will be multiplied by a lower number to determine the total cost (e.g. more daily trip ends than in the peak hour). The choice of the appropriate value for application in this fee study is discussed in Section 6.

SECTION 6: RANSON – CHARLES TOWN TRANSPORTATION FEE STRUCTURE



This section summarizes the fee structure for the Ranson and Charles Town urban growth area. One fee structure has been developed for both cities based on the data and analyses presented in previous sections. The basis of the fee is the cost per trip end values presented in Exhibit 5.5. These values are based on an analysis of transportation needs using the regional travel model, the identification and costing of transportation projects, the determination of project costs attributable to new development in the region, and an estimation of the number of trip ends related to future development.

Exhibit 6.1 illustrates the key steps used to determine the development fee structure. Trip end costs are adjusted to account for residentially-induced growth producing separate trip end costs for residential and non-residential land uses. The trip end costs are then converted into rates for different development types using information from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. These estimates provide the rates in terms of dwelling units and employment square footage, thus simplifying the application of the fee structure. Trip rates have been adjusted to address consistency with the travel model outputs and to account for specific pass-by-trips and trip length characteristics of different land use types.

The trip rates produced in Step 3 are considered the maximum fee rates that can be applied to development in the study area. Step 4 addresses additional credits to reduce transportation development fees. These may include credits for development densities, mixed land use, right-of-way donations, or other developer funded transportation projects. Other fee adjustments may occur as part of city and developer negotiations using other available studies or surveys.

Exhibit 6.1: Steps in Developing the Fee Structure



The following sections document the process and calculations used to estimate the transportation development fee structure. The documentation aims to provide enough detail to justify the calculation of the fee and to serve as a basis for future fee adjustments or revisions. The methodology has utilized available regional modeling tools and national trip rate data sources. As these tools and data sources are revised in the future, potential modifications to the fee structure may be required.



STEP 1: COST PER TRIP END

Estimates of a cost per trip end were presented in Exhibit 5.5. That table presents values for both daily and peak hour time periods. The use of a daily cost per trip end weights all potential development trips equally, no matter what time period they occur in. In these cases, estimates of the total daily trip ends produced by each development unit will be applied to the cost per trip end value. Application of a peak hour cost per trip end would produce higher costs for development units that produce more trips during the peak hours. Many traffic impact fees across the country are focused on the peak hour (e.g. typically the PM peak hour).

This development fee study has focused on addressing key transportation enhancements across the region including congestion relief, safety, multi-modal, and trail connectivity projects and studies. Complete Streets concepts have been included in an effort to improve the safety and livability of city streets, which may promote further economic development. Due to the wide range of regional projects being included, a daily cost per trip end was used for fee application since it weights fees based on the total trips produced by each land use type, not just those that produce trips during the peak hours. This approach has been used by other development fee studies of similar nature. Exhibit 6.2 provides the daily cost per trip end.

Exhibit 6.2: Unadjusted Cost Per Daily Trip End (2010 US \$)

Cost Per Daily Trip End
\$227

STEP 2: ADJUSTMENTS FOR RESIDENTIALLY-INDUCED GROWTH

Many employment categories, in particular commercial and retail establishments, have a significant number of trip ends per day. As a result, such land use types will typically bear a higher fee cost than at the household level. This fee study has adjusted the cost per trip end value to recognize that work and retail activity in the county is highly correlated to residential growth. The Ranson and Charles Town urban area is projected to have more working residents than non-resident workers, thus each new job created in the county reduces the aggregate need to have out-commuting. In addition, retail activity is highly dependent on the population of nearby residents, so such trip ends may also be attributed to the home end.

The regional travel model was used to develop adjustments to the cost per trip end value. The model has three trip purposes: Home-Based Work (HBW), Home-Based Non-Work (HBNW), and Non-Home-Based (NHB). Based on a review of production and attraction growth (between 2010 and the Build-out scenario) by trip purpose, trip ends were allocated to the home-end and non-home-end of activity.

A base case was developed that allocates HBW and HBNW trip ends equally between the home and non-home travel destination (e.g. typically the work location, shopping center, etc.). Next an adjustment scenario was created with allocation assumptions as follows:

- For HBW: Assume all work-related trip ends are assigned to the home end of trip (e.g. the household). This assumes that the household is primarily responsible for job growth in the region or that additional jobs added would reduce the potential for out-commuting.
- For HBNW: Assume that 75% of the trip ends are assigned to the home end and 25% of the trip ends are assigned to the travel destination. This assumes that future retail and commercial development will be added to the region to serve future population and household growth. Not all trips were assigned to the home end (like for HBW) since it was assumed that the household would not be responsible for some non-retail or service employment growth.
- For NHB: Assume all trip ends are not related to the home end of travel. This is inherent based on the definition of the trip purpose. These trips include trips between shopping centers, work to lunch trips, etc.

Exhibit 6.3 summarizes the scenarios and adjustment factors that have been calculated and provides a basis to adjust the cost per trip end values to reflect a larger burden on the household growth in the region. Exhibit 6.4 applies the adjustment factors to estimate a separate adjusted cost per trip end for household (residential) and employment (non-residential) units within the study area.

Exhibit 6.3: Residential-Induced Growth Adjustment Factors

Change in Trip Ends 2010-2035	% Distribution of Total Trip Ends in Study Area	
	Home End	Non-Home End
Base Case HBW and HBNW (1/2 Trip Ends Related to Home) All NHB Ends at Non-Home	30%	70%
Adjustment Case HBW (Both Trip Ends Related to Home) HBNW (75% Trip Ends Related to Home – 25% to Destination) All NHB Ends at Non-Home	49%	51%
Delta Factor (Difference between Adjusted and Base Conditions)	x 1.63	x 0.73

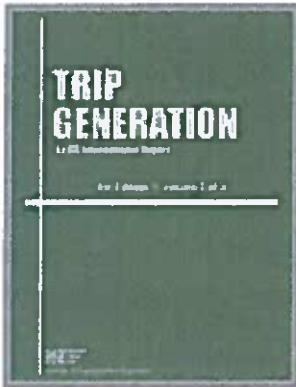
Exhibit 6.4: Adjusted Cost Per Trip End (2010 US \$)

Land Use Category	Original Cost Per Daily Trip End	Adjustment Factor	Cost Per Daily Trip End
Residential	\$227	1.63	\$370
Non-Residential	\$227	0.73	\$166



STEP 3: DEVELOPMENT OF FEE STRUCTURE

A fee structure was developed that includes development fee rates for different types of land uses within the study area. To assist in application, the development fee rates have been expressed in terms of typical land use units, such as cost per dwelling unit and cost per square foot.



The development fee rate has been calculated by multiplying the cost per trip end values by a typical trip generation rate (by trip end) for the land use type. The *ITE Trip Generation Manual, 8th Edition* has been used for this study. The manual is based on hundreds of trip generation surveys nationwide for a range of land use types. It is the most commonly accepted data source for trip generation rates and is a commonly used source for transportation development fee and traffic impact studies. Exhibit 6.5 provides a summary of weekday trip generation rates for various land use types within the ITE manual. A column has been included in the table documenting the number of studies used to determine these rates. As can be seen, some of the land use types do not have a significant number of sources. As a result, care should be taken in the utilization and interpretation of these values.

The available options for a fee structure include developing fees for a detailed number of land use types (e.g. using all of land use types in Exhibit 6.5) or aggregating those land use types into category groups. Due to issues with the statistical relevancy of some of the land use types, a category approach was developed for this fee study.

Exhibit 6.6 presents the land use groups that have been assumed for this study. For each of the categories, an ITE land use type was assigned that best reflects that category and contains a sufficient number of background studies and observations, and included in the table is a description of each as presented in the *ITE Trip Generation Manual*. A category defined as “Other” has been included within the fee structure. This category is assumed to cover any development that cannot be directly related to the other categories. It is assumed that this category will have 50 percent of the trip generation rates of the “Retail” category.

The “Retail” category is a broad category that can include a variety of stores, shopping centers and restaurants. A review of Exhibit 6.5 illustrates that some retail land use types produce very high numbers of daily trips. These include convenience markets, banks, pharmacies, gasoline stations, restaurants and supermarkets. For this fee study, the “Retail” category has been defined using ITE’s “Shopping Center” land use type (ITE Code 820). This land use type has trip rates much lower than some of the trip rates discussed above. Potential justifications for the application of lower trip rates to these developments include:

- Not all of these trips are “newly” generated trips due to the development. In many cases such land use generates intermediate stops for travelers on the way to other destinations (to be discussed further).
- Many smaller retail stores (e.g. convenience markets, gas stations, etc.) are the result of increased population in the region and directly serve that population.

The use of category fee rates will certainly create potential issues like those discussed above; however, it was determined that keeping the fee structure as simple as possible would aid in application of the fee structure.

Exhibit 6.5: Weekday Trip Generation Rates, ITE Trip Generation Manual, 8th Edition

Land Use	Units	ITE Code	# of Studies	ITE Daily Trip End Rate
Residential				
Single Family Detached Housing	DU	210	351	9.57
Residential Condominium/Townhouse	DU	230	56	5.81
Industrial				
General Light Industrial	1000 sq ft	110	18	6.97
General Heavy Industrial	1000 sq ft	120	3	1.50
Industrial Park	1000 sq ft	130	49	6.96
Commercial – Office				
General Office Building	1000 sq ft	710	78	11.01
Business Park	1000 sq ft	770	15	12.76
Retail				
Warehousing	1000 sq ft	150	18	3.56
Mini Warehouse	1000 sq ft	151	14	2.50
Shopping Center	1000 sq ft	820	302	42.94
Convenience Market	1000 sq ft	851	8	737.99
Hardware/Paint Store	1000 sq ft	816	3	51.29
Home Improvement Superstore	1000 sq ft	862	9	29.80
Pharmacy	1000 sq ft	880	6	90.06
Furniture Store	1000 sq ft	890	13	5.06
Bank	1000 sq ft	912	7	148.15
Quality Restaurant	1000 sq ft	931	15	89.95
Restaurant (High turnover, sit down)	1000 sq ft	932	14	127.15
Fast Food Restaurant	1000 sq ft	934	21	496.12
Gasoline/ Service Station	Pumps	944	6	168.56
Gasoline Station with Convenience Market	Pumps	945	11	162.78
Discount Superstore	1000 sq ft	813/815	45/25	53.13/57.24
Supermarket	1000 sq ft	850/854	4/7	102.24/96.82
Nursery – Garden Center	1000 sq ft	817	11	36.08
Nursery – Wholesale	Acres	818	1	19.50
Health Club, Recreation Center	Ksf	492	1	32.93
Golf Course	Holes	430	18	35.74
Institutional				
Elementary School	Students	520	33	1.29
Middle School	Students	522	20	1.62
High School	Students	530	51	1.71
Church	Ksf	560	8	9.11
Park/ Open Space	Acres	411	3	1.59
Lodging				
Hotel	Rooms	310	10	8.17
Motel	Rooms	320	10	5.63



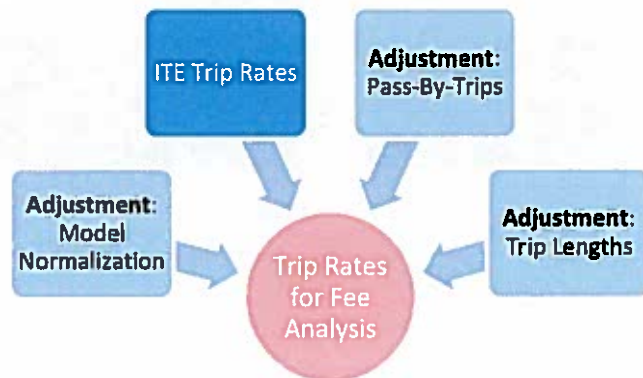
Exhibit 6.6: Fee Study Land Use Categories

Land Use Category	Assumed ITE Land Use Type To Represent Category	ITE Category Description
Residential Single-Family	210 Single Family Detached Housing	Single-family detached housing includes all sing-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.
Residential Multi-Family	230 Residential Condominium /Townhouse	Residential condominiums/townhouses are defined as ownership units that have at least one other owned unit within the same building structure. This category does not distinguish between a low-rise and high-rise condominium/townhouse.
Retail	820 Shopping Center	A shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. A shopping center's composition is related to its market area in terms of size, location and type of store. Shopping centers, including neighborhood centers, community centers, regional centers and super regional centers were surveyed for this land use. Some of these centers contained office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities. The centers ranged in size from 1,700 to 2.2 million square feet (GLA).
Office	710 General Office Building	A general office building houses multiple tenants; it is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building or buildings may contain a mixture of tenants including professional services, insurance companies, investment brokers and tenant services, such as a bank or savings and loan institution, a restaurant or cafeteria and service retail facilities.
Industrial	110 General Light Industrial	Light industrial facilities are free-standing facilities devoted to a single use. The facilities have an emphasis on activities other than manufacturing and typically have minimal office space. Typical light industrial activities include printing, material testing and assembly of data processing equipment.
Warehouse	150 Warehousing	Warehouses are primarily devoted to the storage of materials, but they may also include office and maintenance areas.
Other	----	Not defined in ITE Manual. Assumed as 50% of retail rate trip generation rates.

A trip-end-based methodology is used to estimate transportation development fees in order to attribute them to residential and non-residential land uses. The trip end rates from the ITE *Trip Generation Manual* were used as the starting point for fee calculations but were adjusted to account for the following issues:

- Differences between the travel model and ITE trip rates
- Pass-By-Trips
- Trip Lengths

The HEPMPO regional travel model was used to determine the number of future trip ends due to projected development in the Ranson / Charles Town study area and to calculate a cost per trip end. These estimates were based on the travel model's household-based trip rates. Note, for the home-based trip purposes (e.g. trips with one trip end at home end), the model estimates total trips based on the number of households and the trip rates. The employment categories are only used as weighted adjustments to allocate and distribute the origins and destinations of those trips. The ITE



Trip Generation Manual was used to provide a more detailed assessment of trip ends by land use type. The rates are applied to the cost per trip end to develop fees for each land use. To ensure there is some consistency between these two resources, the total household trip productions were compared against the ITE values for single family homes. The model rates were 8% lower; thus an adjustment factor of 0.92 was applied to the ITE trip rates for all land uses to improve total trip consistency between the sources.

Transportation development fee studies typically also account for pass-by-trips and differing trip lengths due to each land use type. Pass-by trips are made by traffic already using the adjacent roadway and include intermediate stops on the way to another destination (e.g. on the way to work). These trips may not be considered as “newly” generated trips by the land use and are often discounted from the fee calculations. The *ITE Trip Generation Handbook (2nd Edition)* has been used to estimate typical pass-by-trip percentages for the land use categories that the fee structure is based on. The pass-by-trip percentages vary based on time period and size of the development. For example, smaller shopping centers typically have higher pass-by-trip percentages than very large shopping centers or malls. In addition, pass-by-trips may be higher during peak periods. Based on the ITE handbook, adjustments to trip rates have only been applied for the “Retail” and “Other” categories included in this fee structure. A typical pass-by-trip percentage of 40 percent (equates to a factor adjustment of trip rate of 0.60) was applied to the “Retail” category. A higher pass-by-trip percentage of 50 percent was applied to the “Other” category due to the fact that this category may include smaller developments that may be more likely intermediate stop locations.

The trip rates for some non-residential development were further adjusted to account for the length of trips associated with each land use type. Trip lengths for retail and other purposes may be considered less than standard trips. Supermarkets, restaurants, and convenience markets may even have average trip lengths shorter than other commercial trips. There are limited available research studies and resources on trip lengths by land use type, as this information is difficult to collect without detailed trip diary surveys. For this fee study, trip lengths were evaluated qualitatively and assumed adjustment values were applied to the trip rates. A 25 percent (equates to a factor adjustment of trip rate of 0.75) reduction was assumed for the “Retail” and “Other” land use categories.

Exhibit 6.7 summarizes the final fees and calculations by residential dwelling unit and non-residential square footage. These fees represent the maximum allowable fee by land use category. Additional fee credits and developer negotiations are addressed in Step 4.



Exhibit 6.7: Fee Calculations (2010 US \$)

Land Use Category	Unit	Daily Trip End Cost	ITE Code	ITE Daily Trip End Rate	Model-ITE Adjustment	Trip Length Adjustment	Pass-By-Trip Adjustment	Fee (\$)
Residential								
Single-Family	Dwelling Unit	\$370	210	9.57	0.92	1.00	1.00	\$3,254
Multi-Family	Dwelling Unit	\$370	230	5.81	0.92	1.00	1.00	\$1,976
Non-Residential								
Retail	1,000 Square Feet	\$166	820	42.94	0.92	0.75	0.60	\$2,943
Office	1,000 Square Feet	\$166	710	11.01	0.92	1.00	1.00	\$1,677
Industrial	1,000 Square Feet	\$166	110	6.97	0.92	1.00	1.00	\$1,061
Warehouse	1,000 Square Feet	\$166	150	3.56	0.92	1.00	1.00	\$542
Other	1,000 Square Feet	\$166	----	21.00	0.92	0.75	0.50	\$1,199

Exhibit 6.8 provides a comparison of the fee structure to other areas across the country. The survey of fees was conducted by Duncan Associates in 2010 and is summarized on the website: www.impactfees.com. The results indicate that the estimated fees are consistent with national and nearby state averages. Due to the adjustments for residentially induced travel, the fee structure values are higher for households and lower for employment.

Exhibit 6.8: Comparison of Fees to Other Jurisdictions

Land Use Category	Unit	Draft Fees Fee (\$)	2010 National Impact Fee Survey <i>Duncan Associates</i>	
			National Average (275 Jurisdiction Sample)	PA-MID-VA-OH (16 Jurisdiction Sample)
Single-Family	Dwelling Unit	\$3,254	\$3,227	\$2,791
Multi-Family	Dwelling Unit	\$1,976	\$2,179	\$2,041
Retail	1,000 Square Feet	\$2,943	\$5,946	\$3,758
Office	1,000 Square Feet	\$1,677	\$3,360	\$3,240
Industrial	1,000 Square Feet	\$1,061	\$2,060	\$2,004
Warehouse	1,000 Square Feet	\$542	----	----
Other	1,000 Square Feet	\$1,199	----	----

STEP 4: FEE CREDITS

The fee structure provided in Exhibit 6.7 provides the maximum fees that may be applied to different development types. Specific fee credits are identified to promote reduced trip making and livable communities, account for possible right-of-way donations that will support future regional transportation projects, and account for project construction for projects that are deemed by the city to provide regional benefits. Exhibit 6.9 summarizes the fee credit structure and values. Fee credits for development types and livable community improvements have been estimated based on a literature review of potential benefits of such developments. A key reference to those values, as used for this fee study, is the following report: *Impact Fee Credits for Livable Communities Improvements: Technical Memorandum #1 Literature Review and Alternative Approaches*, Center for Urban Transportation Research, University of South Florida, January 2004.

Exhibit 6.9: Fee Credits

Category	Fee Credit	Description
Mixed Use Development	30%	<ul style="list-style-type: none"> Applies to all land use categories Mixed-Use as defined by Ranson Zoning Ordinance
Traditional Neighborhood Development (TND)	50%	<ul style="list-style-type: none"> Applies to all land use categories TND as defined by Ranson Zoning Ordinance
Livable Community Improvements	10%	<ul style="list-style-type: none"> Applies to all land use categories Requires: <ul style="list-style-type: none"> Construction of off-road internal bike/pedestrian network, connection to nearest arterial roadway, connection to nearby commercial/retail/park/school/transit station, and connections to other nearby existing shared-use paths.
Right-of-Way Property Donation	\$ credit	<ul style="list-style-type: none"> Estimated cost of property donation needed for regional capacity improvement project that benefits regional congestion and safety
Transportation Capacity Project Construction	\$ credit	<ul style="list-style-type: none"> Portion of construction costs from developer for regional capacity improvement project that benefits regional congestion and safety



SECTION 7: FEE APPLICATION SUMMARY

This report has summarized the technical methodologies and assumptions used to estimate a transportation development fee for Ranson and Charles Town, West Virginia. These fees represent the maximum fees that may be justified for transportation purposes. The cities of Ranson and Charles Town will use an ordinance to carry out the fee structure documented in this report and decide on potential fee credits to reflect unique development characteristics, developer projects or donations, and to ensure that the fees do not prevent regional housing and economic growth within the region. All adjustments to fees should be made fairly, agreed upon and be documented sufficiently. Appendix D provides a 2-page summary of the fee structure and can serve as a public information document.

FEE PROCESS

Exhibit 6.10 summarizes the process to determine the transportation development fee. After determining and reviewing the development characteristics, a decision will determine if the development is exempt from transportation development fees. Typical exemptions include:

- Existing dwelling units and non-residential buildings
- Re-development within existing buildings
- Low-income housing
- Brownfield development

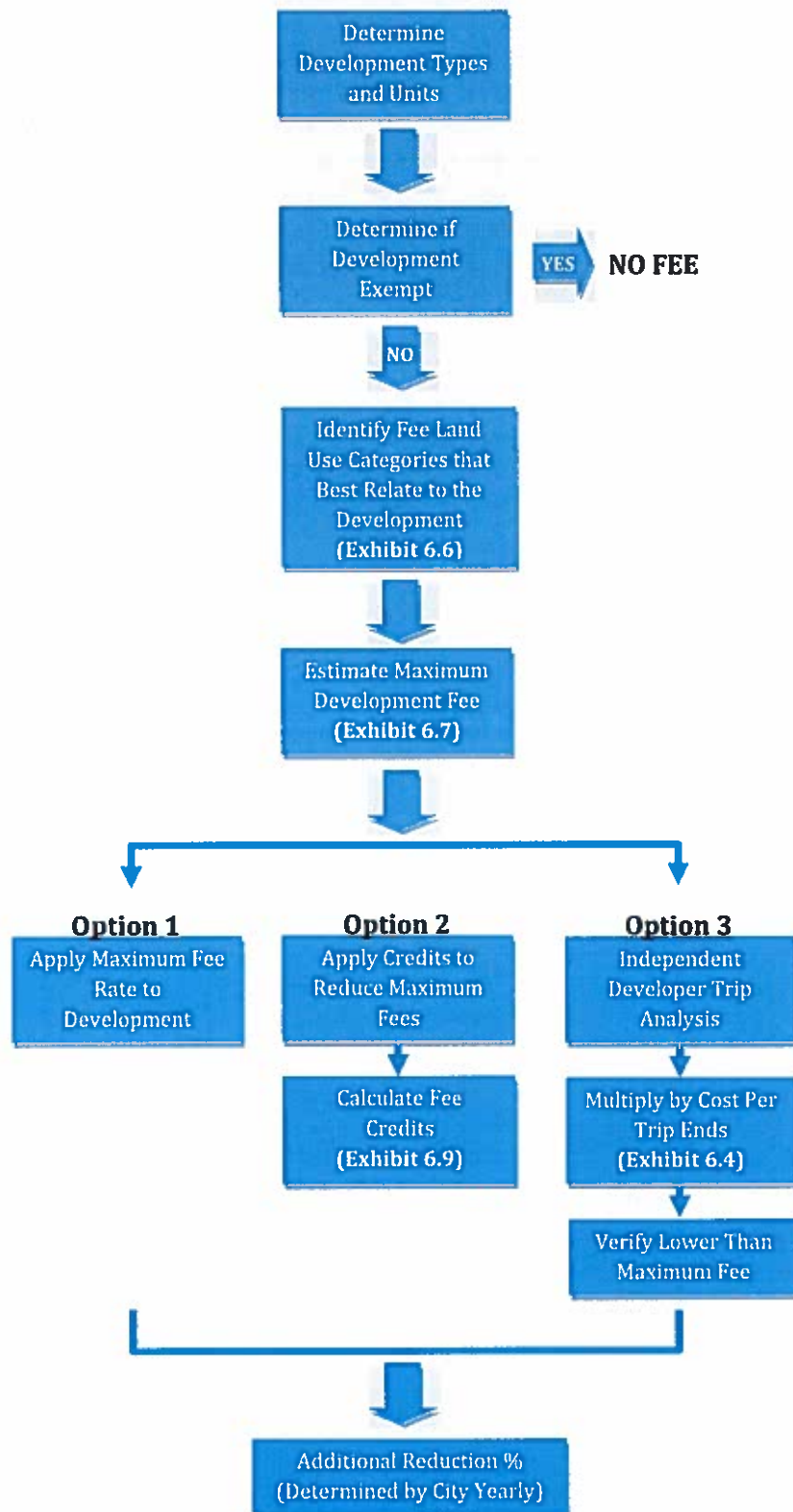
Additional exemptions can be determined in writing and subject to appeal by the appropriate city council. Next, the development land use will be correlated to the fee development types. Mixed-use development should be divided into housing and employment types separately. Exhibit 6.7 can then be used to estimate the maximum fees for each development type and summed to determine a total fee cost if there are multiple development categories.

At this point, several options exist for fee application:

1. Apply the maximum fee rates.
2. If applicable, apply fee credits as summarized in Exhibit 6.9.
3. If in the judgment of the city, none of the fee categories or fee amounts set forth in the fee structure accurately describe or capture the impacts of a new development on roads, the city may ask the applicant to conduct independent fee analysis and the city may impose alternative fees on a specific development based on the application. The fee calculations may be based on the cost per trip end values presented in Exhibit 6.4. The alternative fees and the calculations shall be set forth in writing and shall be agreed to by the city and the fee payer. The documentation submitted must show the basis upon which the independent fee calculation was made.

In addition to the above fee adjustments, the city council has the option to review and adjust the development fee on an annual basis. This may be conducted to ensure that fees are reasonable under the current economic situation and to ensure that regional growth and economic development are not negatively impacted by the fee amounts. This fee report has documented maximum fee amounts that may be charged to the development; however, the city does have the flexibility to lower fees as long as it is done in a fair process to all parties and is documented sufficiently.

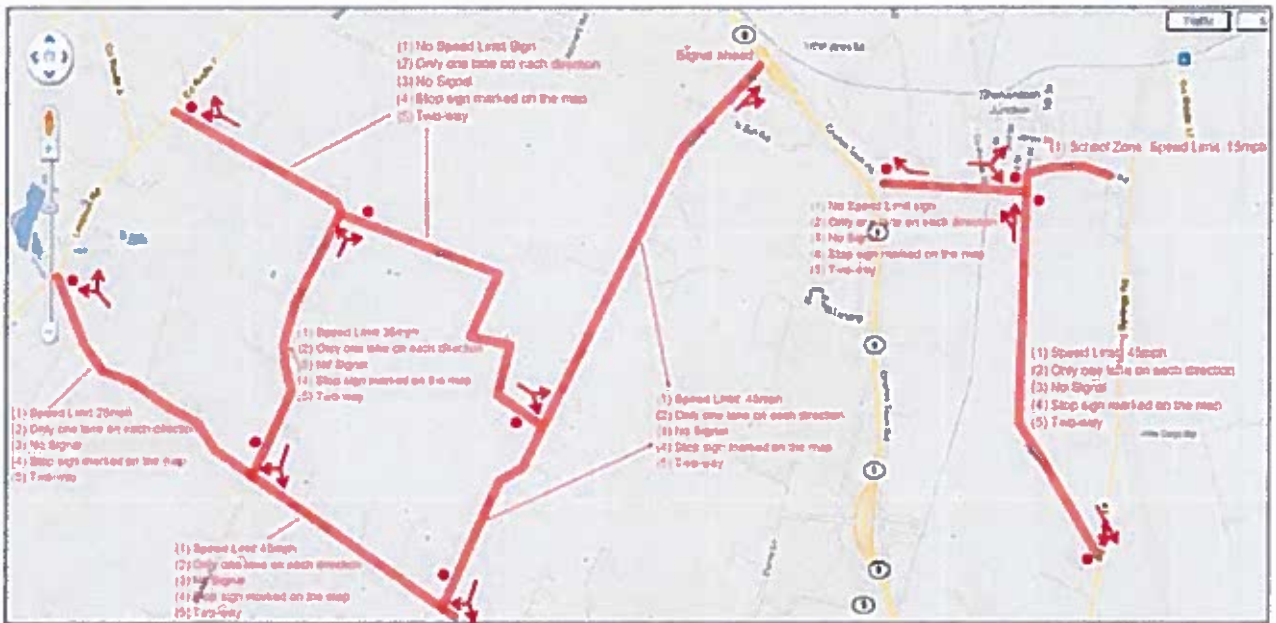
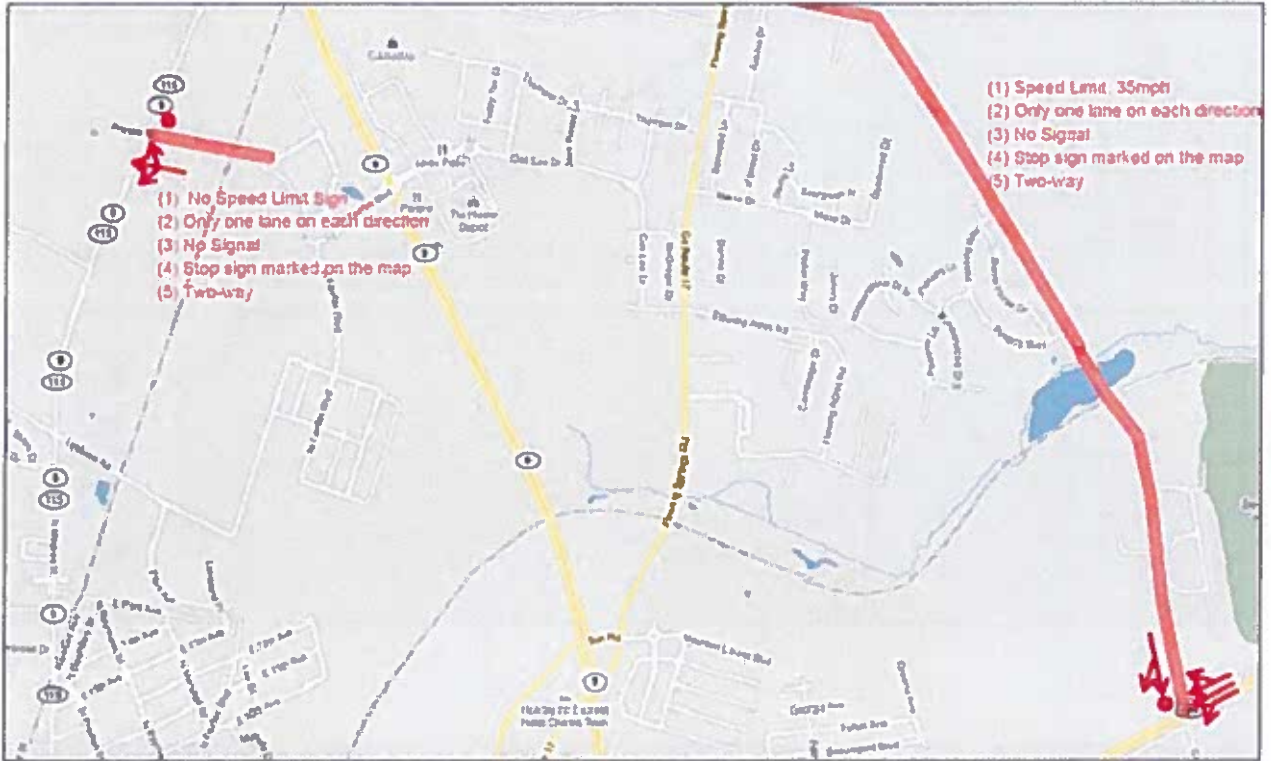
Exhibit 6.10: Fee Application Process



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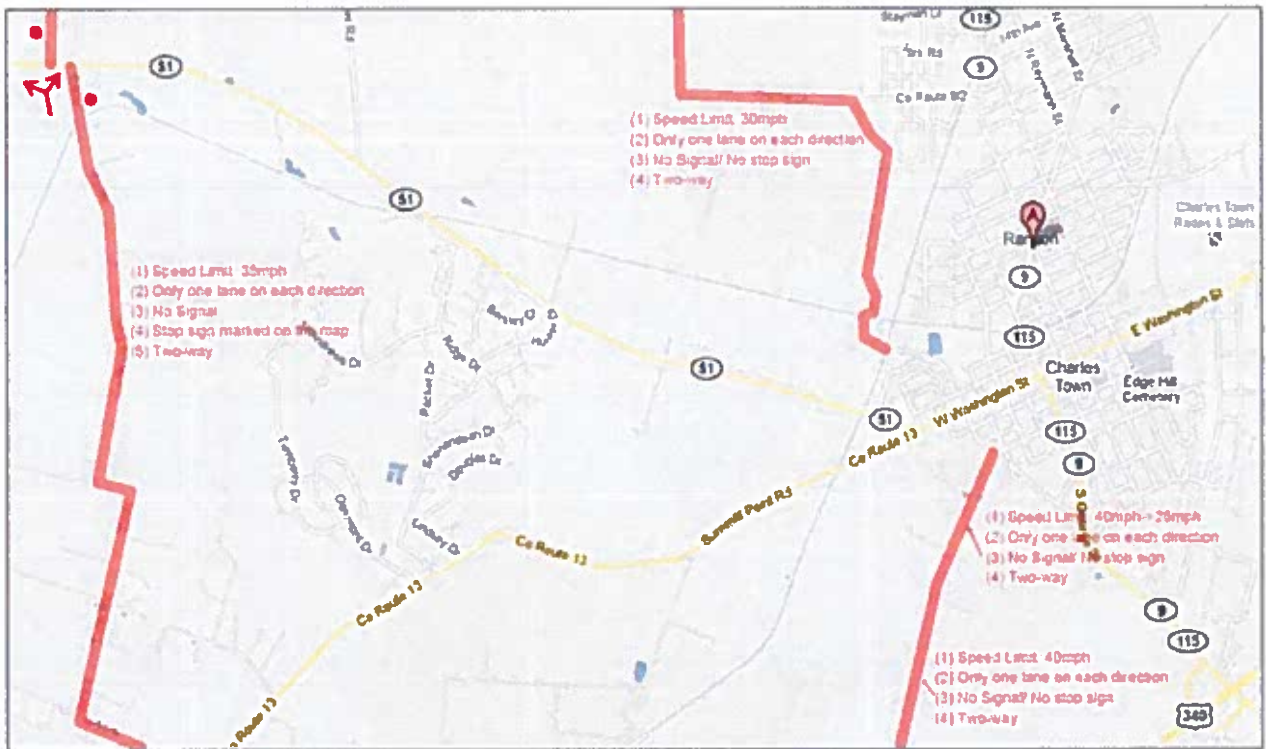
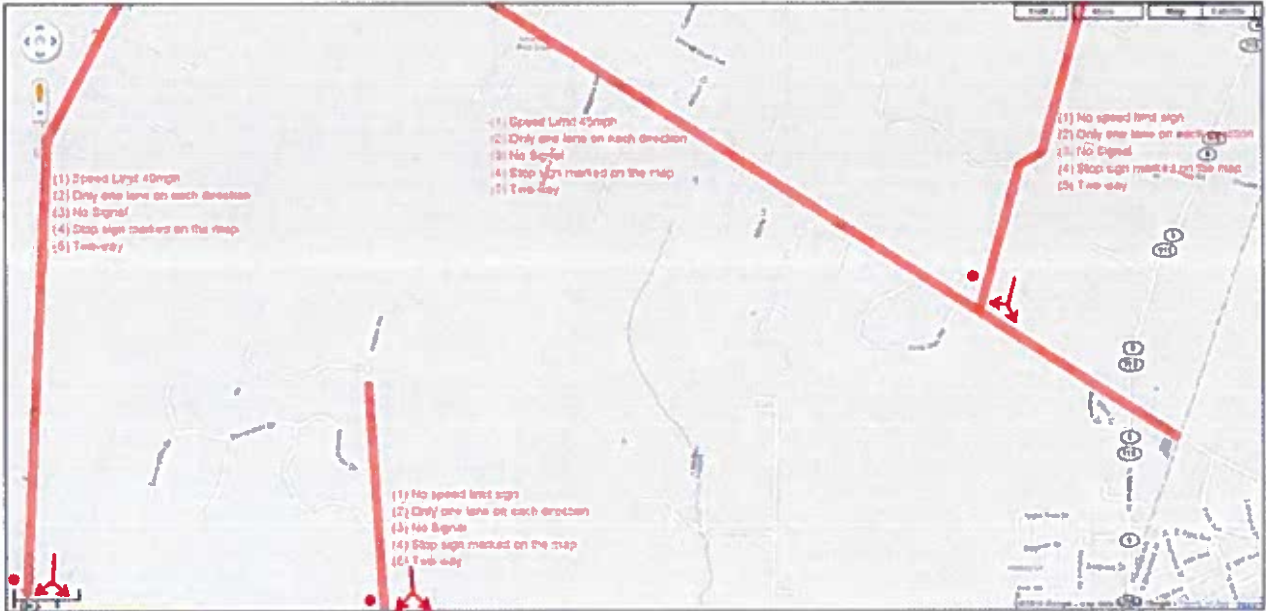


APPENDIX A: ROADWAY INVENTORY FIELD NOTES

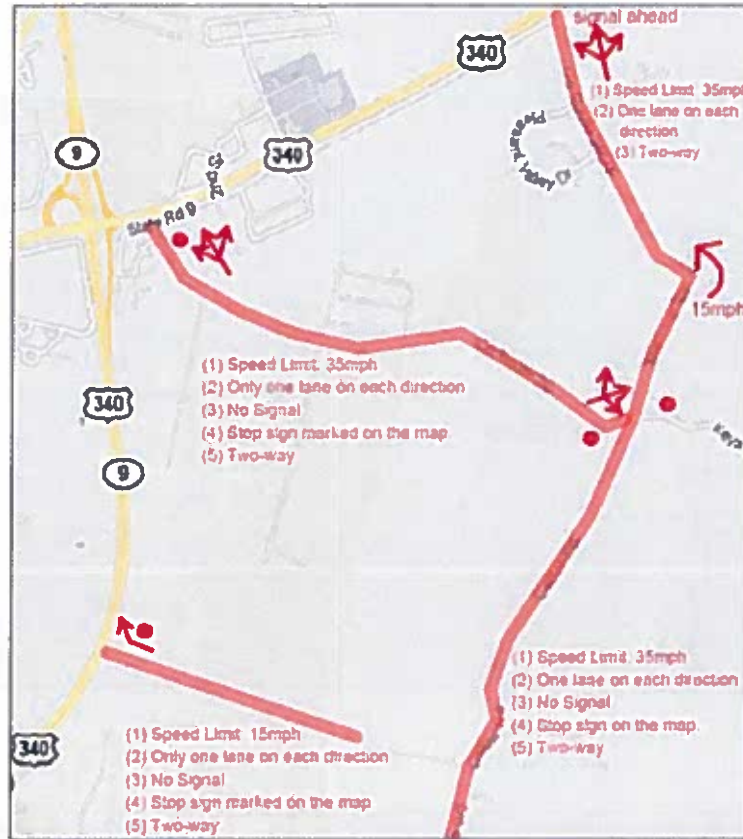


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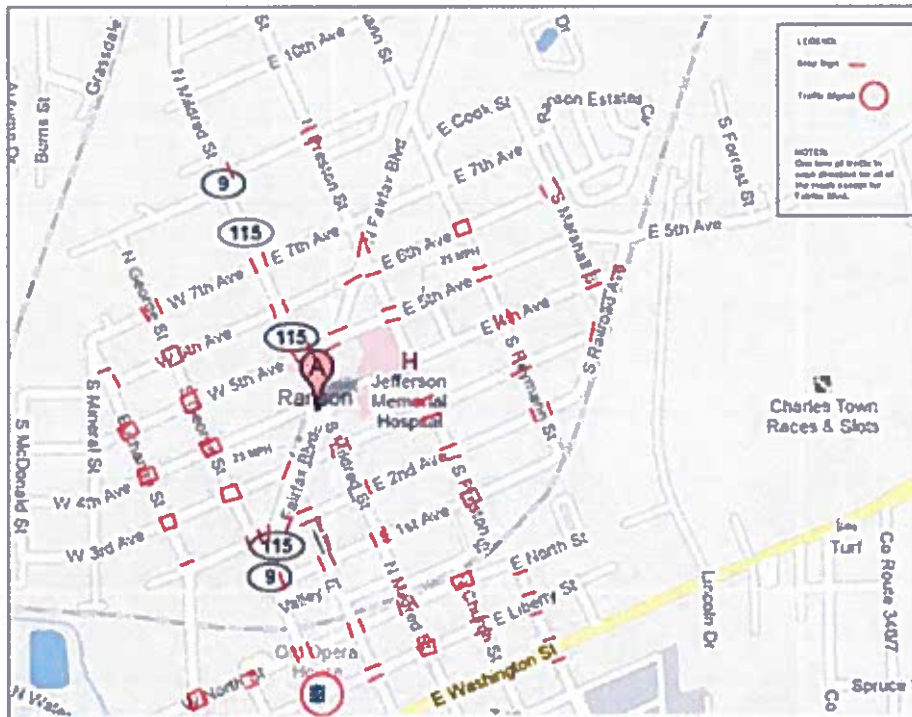
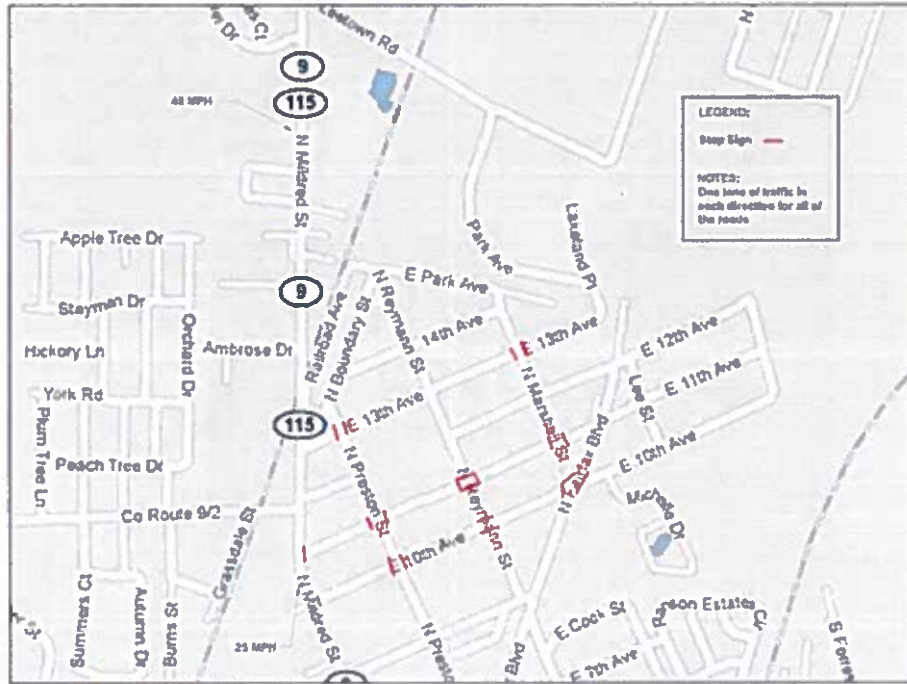
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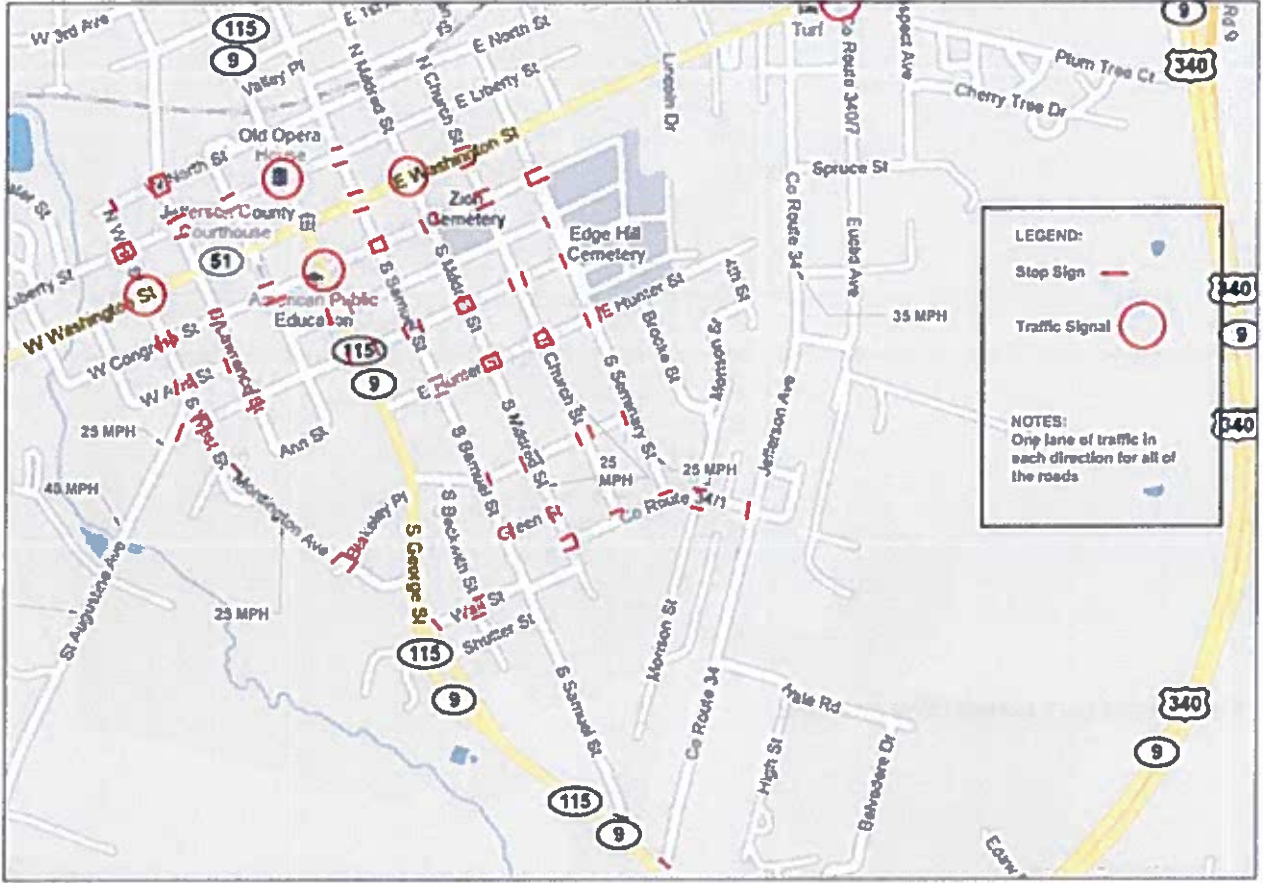


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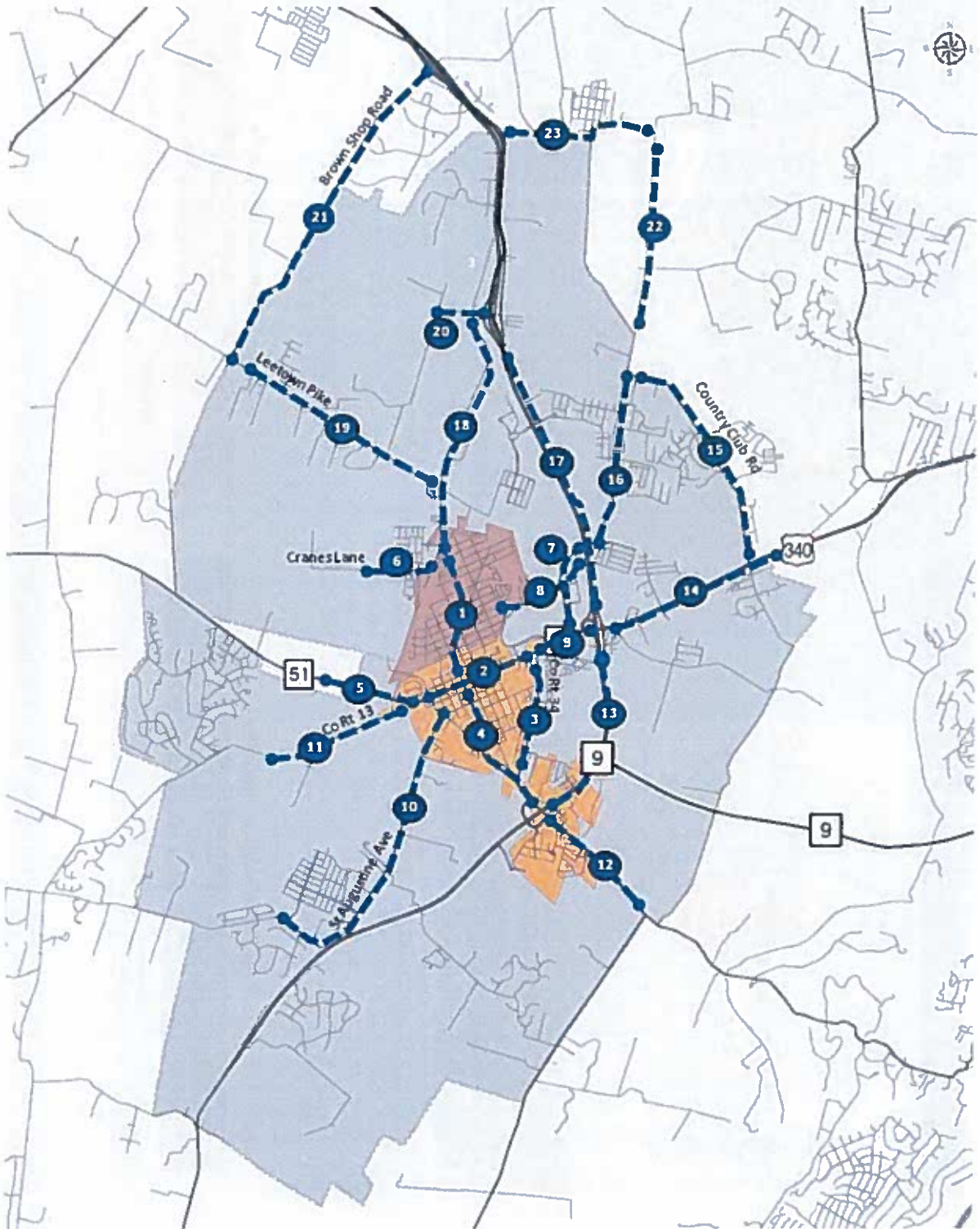
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Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)



APPENDIX B: CORRIDOR CONGESTION SHEETS

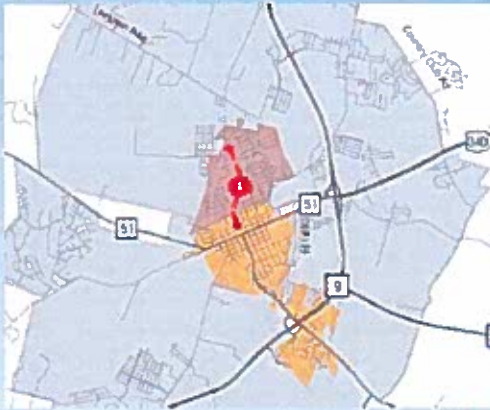
Corridor Definitions



Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Corridor 1: Route 115/9

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with E Washington St	6,100	0.95	190	3%
Intersection with 4th Ave	5,600	0.88	100	3%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
8,300 (36%)	0.98	290	2%
8,100 (45%)	1.06	420	2%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
10,800 (77%)	1.13	530	1%
10,800 (93%)	1.19	620	1%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	Limited ROW	X	X	X

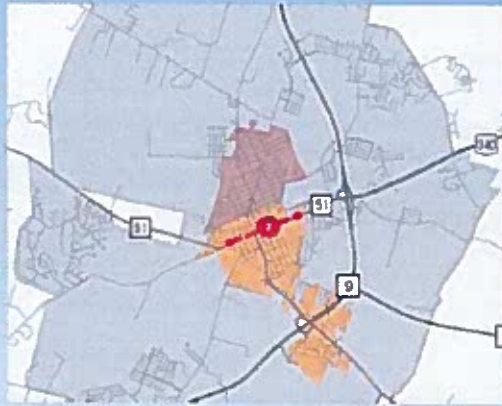
Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Fairfax Blvd	Divert traffic to parallel facility	Yes
Currie Road Extension	Divert traffic to parallel facility	Yes

CORRIDOR DETAIL SHEETS

Corridor 2: Route 51 – Washington St

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Martin Luther King Blvd	8,200	1.03	280	16%
Intersection with N George	8,200	0.83	40	18%
Intersection with Hollywood	14,000	0.81	20	9%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
9,000 (10%)	1.28	770	22%
8,600 (5%)	0.84	60	26%
14,100 (1%)	0.89	180	15%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
10,300 (26%)	1.48	1,090	25%
9,200 (12%)	1.02	350	27%
15,400 (10%)	0.95	300	17%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	Limited ROW	X	X	X

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Traffic Safety & Pedestrian Mobility	Improve pedestrian safety and improve intersection design along Washington Street	No (Identified by City)
Charles Washington Hall Multimodal Center	Improve access to transit stops	No (Identified by City)

CORRIDOR DETAIL SHEETS

Corridor 3: Co Route 34

Project Location

Corridor Details

Existing Conditions					Projected 2020				Projected 2035			
Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
Intersection with Washington St	6,500	0.43	-	0%	7,000 (8%)	0.91	170	0%	8,100 (25%)	1.01	320	1%
Intersection with Rt 115	6,000	0.36	-	0%	6,000 (0%)	0.58	-	1%	6,600 (10%)	0.67	-	2%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
		X		

Identified Projects

Project Name	Project Impact on Corridor	Identified During IRTP Process
Co34 @ Washington Street Intersection Improvement	Improve operations at intersection (Improved signal timing / turning lanes)	No (From this study)

CORRIDOR DETAIL SHEETS

Corridor 4: Route 115/9

Project Location



Corridor Details



Existing Conditions

Projected 2020

Projected 2035

Location	Daily Volume	Peak V/C	Excess Demand (VPII)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPII)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPII)	% of Thru UGB Traffic
Bridge over US 340	14,700	0.74	-	12%	14,700 (0%)	0.68	-	10%	17,400 (18%)	0.88	160	10%
Intersection with S Samuel	6,200	0.28	-	14%	8,400 (35%)	0.53	-	10%	11,000 (77%)	0.62	-	9%
Intersection with Washington St	6,100	0.38	-	9%	8,400 (38%)	1.03	370	7%	10,500 (72%)	1.20	640	4%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
		Limited ROW		X

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Route 9 TSM	Intersection improvements on southern end of corridor	Yes
Downtown Traffic Flow Study	Address future traffic concerns through a future study of key intersections	No (From this Study)

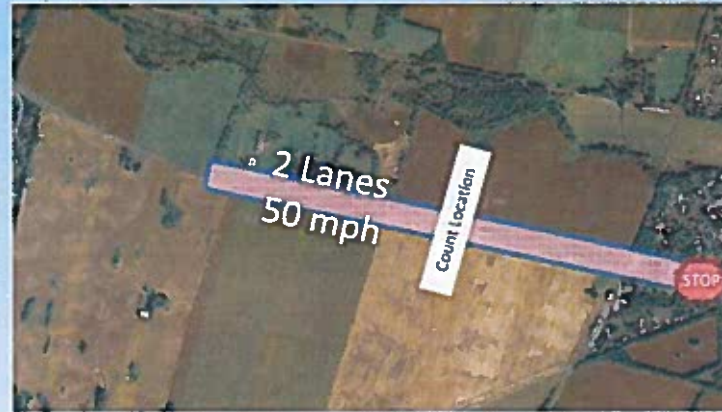
CORRIDOR DETAIL SHEETS

Corridor 5: Route 51

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Washington St*	8,200	0.89	110	23%
Intersection with Eagle Ave	9,100	0.48	-	23%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
9,100 (11%)	0.94	220	31%
10,300 (13%)	0.48	-	30%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
10,100 (23%)	1.01	340	34%
11,600 (27%)	0.53	-	32%

* identified as current congested location – traffic counts do not properly account for peak hour vehicle queuing

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X		X

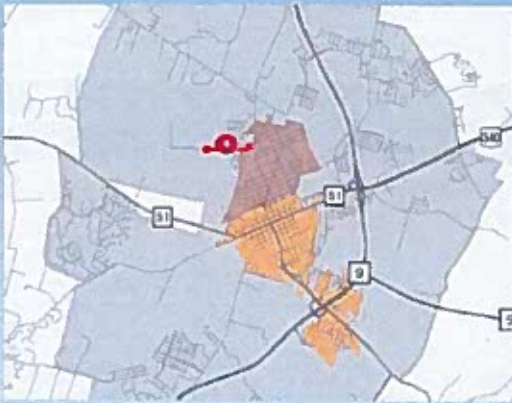
Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
WV51 Washington and Summit Point Road	Intersection Redesign to improve flow on eastbound Route 51	Yes
WV51 Widening	New Alignment with Capacity Improvements	Yes

CORRIDOR DETAIL SHEETS

Corridor 6: Cranes Lane

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Rt 115	2,300	0.16	-	0%
Intersection with Grassdale St	2,300	0.12	-	0%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
5,500 (139%)	0.93	190	0%
5,500 (139%)	0.49	-	0%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
8,900 (287%)	1.19	570	0%
8,900 (287%)	0.65	-	0%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X		X

Identified Projects

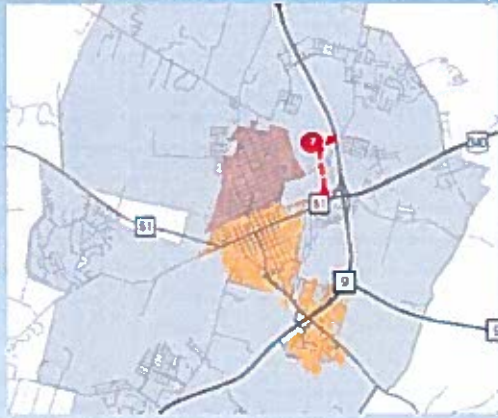
Project Name	Project Impact on Corridor	Identified During LRTP Process
Curie Road Extension	Provide access to downtown for new development in area	Yes
Beldine Ave West Extension	Provide access to downtown for new development in area	Yes

CORRIDOR DETAIL SHEETS



Corridor 7: Sun Rd/Flowing Springs Rd

Project Location



Corridor Details



Existing Conditions

Projected 2020

Projected 2035

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
Intersection with 5th Ave	12,900	0.89	130	1%	15,000 (16%)	0.74	-	1%	18,000 (40%)	0.88	140	4%
Intersection with Washington St	12,900	0.85	80	1%	14,500 (12%)	0.89	140	1%	17,200 (33%)	1.02	330	4%

* Intersection of Sun Rd / Rt 9 also identified as congested location outside of model analysis

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
		X	X	

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Beltline Ave East Extension	Provide relief to intersection with 5 th avenue	Yes

CORRIDOR DETAIL SHEETS

Corridor 8: 5th Ave/Co Route 17

Project Location



Corridor Details



Existing Conditions

Projected 2020

Projected 2035

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
Intersection with Hollywood	14,300	0.66	-	0%	16,000 (12%)	1.31	970	0%	18,300 (28%)	1.44	1,220	1%
1 Mile W/O CO 17	15,100	0.64	-	0%	17,200 (14%)	1.28	910	0%	18,600 (23%)	1.37	1,080	1%
Intersection with Sun Road	13,000	0.90	150	0%	14,900 (15%)	2.02	2,140	0%	16,200 (25%)	2.18	2,420	1%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X		X

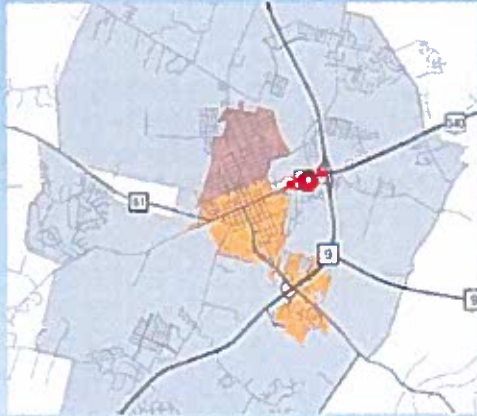
Identified Projects

Project Name	Project Impact on Corridor	Identified During I RTP Process
Beltline Ave East Extension	Provide relief to 5 th avenue	Yes

CORRIDOR DETAIL SHEETS

Corridor 9: E Washington St

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Hollywood	16,000	1.00	320	10%
Intersection with Co Route	16,000	1.33	640	7%
Intersection with Rt 9 Ramp	16,000	0.67	-	23%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
17,700 (11%)	1.79	1,580	15%
18,300 (14%)	2.25	1,740	11%
18,300 (14%)	1.35	1,320	26%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
20,300 (27%)	1.92	1,790	17%
19,900 (24%)	2.44	1,970	13%
20,800 (30%)	1.47	1,610	27%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X	X	X

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
East Washington Street Traffic Improvements	Increase capacity and signal optimization	No (From this Study)

CORRIDOR DETAIL SHEETS

Corridor 10: Huyett Rd / St Augustine Ave

Project Location



Corridor Details



Existing Conditions

Projected 2020

Projected 2035

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
Intersection with S West St	3,600	0.22	-	0%	5,400 (50%)	0.48	-	0%	8,200 (128%)	0.63	-	0%
S/O W Academy St	3,600	0.22	-	0%	5,300 (47%)	0.41	-	0%	8,900 (147%)	0.59	-	0%
Huyett Rd	1,600	0.13	-	20%	5,600 (250%)	0.81	10	6%	9,300 (481%)	1.31	640	2%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
			X	

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Huyett Road Intersection Improvements	Improve intersection operation at St. Augustine Avenue – Possible signalization	No (From this Study)

CORRIDOR DETAIL SHEETS

Corridor 11: Co Route 13 / Summitt Point Rd

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Washington St	3,100	0.21	-	5%
3 Mile W/O WV 51	3,100	0.16	-	5%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
3,200 (3%)	0.49	-	5%
3,200 (3%)	0.25	-	5%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
3,700 (19%)	0.61	-	7%
3,600 (16%)	0.32	-	7%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
X				

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
WV51 Washington Street and Summitt Point Rd	Project focuses on WV51 congestion reduction but should provide adequate operations for Summitt Rd Approach	Yes

CORRIDOR DETAIL SHEETS

Corridor 12: Old Route 9

Project Location



Corridor Details



Existing Conditions

Projected 2020

Projected 2035

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
Intersection with US 340 Ramp*	14,700	0.74	-	26%	14,700 (0%)	0.61	-	24%	14,700 (0%)	0.59	-	21%
Intersection with Crosswinds Dr*	14,700	0.74	-	27%	14,700 (0%)	0.59	-	24%	14,700 (0%)	0.61	-	21%

* Identified as current congested location – traffic counts do not properly account for peak hour vehicle queuing

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X	X	

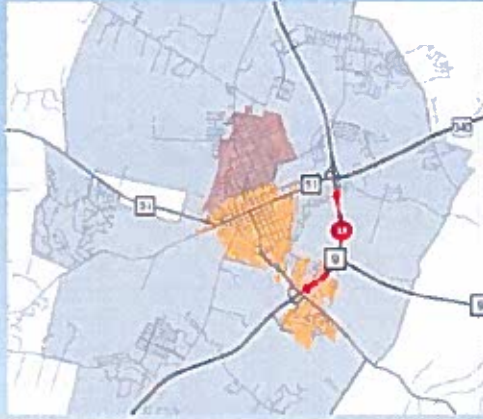
Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Old Route 9 TSM	Access Management improvements to relieve intersection congestion	Yes

CORRIDOR DETAIL SHEETS

Corridor 13: US 340 / Route 9

Project Location



Corridor Details



Existing Conditions

Projected 2020

Projected 2035

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
N/O Crescent Dr (New Interchange) Both	20,700	0.41	-	44%	32,000 (55%)	0.99	910	33%	43,200 (109%)	1.26	2,210	29%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X			X

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
WV9: US340 to VA State Line New Alignment 4 Lanes	Improve operations and relieve congestion	Yes TIP Project

CORRIDOR DETAIL SHEETS

Corridor 14: US 340

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Route 9 Ramp	37,700	1.57	1,850	32%
Intersection with Patrick Henry Way	37,700	1.05	900	38%
Intersection with Country Club Road	37,700	1.05	900	38%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
41,100 (9%)	1.66	2,060	34%
38,800 (3%)	1.25	1,620	38%
38,800 (3%)	1.06	1,010	38%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
45,500 (21%)	1.79	2,380	35%
38,500 (2%)	1.25	1,620	39%
38,500 (2%)	1.12	1,250	39%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X	X	X

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
US 340 & Country Club Interchange	Improve corridor operation and remove signal constraints	Yes

CORRIDOR DETAIL SHEETS

Corridor 15: Country Club Road

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPII)	% Thru UGB Traffic
Intersection with US 340	3,500	0.23	-	9%
Intersection with Co Route 17	3,500	0.24	-	6%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPII)	% of Thru UGB Traffic
6,400 (83%)	0.67	-	10%
7,100 (103%)	0.86	90	7%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPII)	% of Thru UGB Traffic
9,100 (160%)	0.82	-	13%
10,100 (189%)	1.15	510	8%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X		X

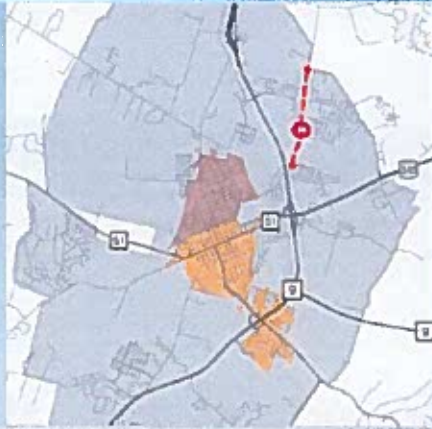
Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
US 340 & Country Club Interchange	Improve corridor operation and remove signal constraints	Yes

CORRIDOR DETAIL SHEETS

Corridor 16: Flowing Springs Road / Co Route 17 / Sun Road Connection to Route 9

Project Location



Corridor Details



Existing Conditions

Projected 2020

Projected 2035

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic	Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
Intersection with Sun Road	6,300	0.52	-	6%	7,600 (21%)	0.82	40	6%	10,000 (59%)	0.92	230	5%
Intersection with Country Club Road	5,000	0.58	-	5%	7,600 (52%)	0.87	130	5%	10,600 (112%)	0.94	280	4%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
		X	X	

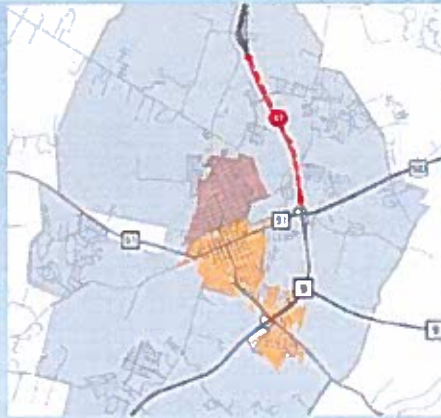
Identified Projects

Project Name	Project Impact on Corridor	Identified During IRTP Process
Sun Road / Route 9 / Flowing Springs Road Intersection Improvements	Possible Signalization to improve intersection operations	No (From this Study)

CORRIDOR DETAIL SHEETS

Corridor 17: Route 9

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Oak Lee Drive/Fairfax Blvd	17,600	0.85	120	27%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
27,800 (58%)	1.52	1,730	17%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
38,400 (118%)	2.01	2,920	11%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X		X

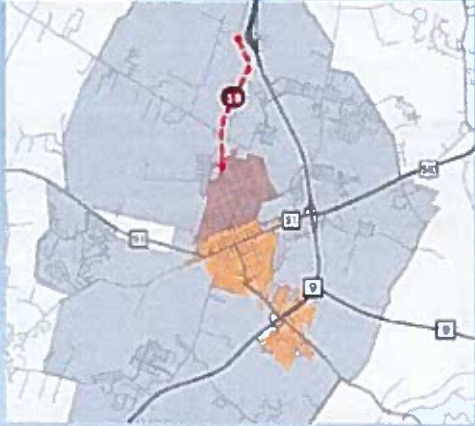
Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Route 9 Traffic Study	Study possible increase in lanes / removal of add-grade access	No (from this study)

CORRIDOR DETAIL SHEETS

Corridor 18: Route 115/9 – Mildred St

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
South of Leetown Pike	5,600	0.53	-	4%
North of Leetown Pike	5,000	0.42	-	0%
Intersection with Currie Lane	5,600	0.70	-	0%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
9,300 (66%)	0.77	-	2%
12,700 (154%)	0.64	-	0%
11,900 (113%)	0.95	230	0%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
13,800 (146%)	0.96	320	1%
22,900 (358%)	0.90	200	0%
18,400 (229%)	1.30	750	0%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X		X

Identified Projects

Project Name	Project Impact on Corridor	Identified During IRTP Process
Mildred St: Widen to 4 Lanes	Increase Capacity along Rt 115	Yes
Mildred St & Leetown Pike Intersection Improvement	Increase Capacity along Rt 115	Yes

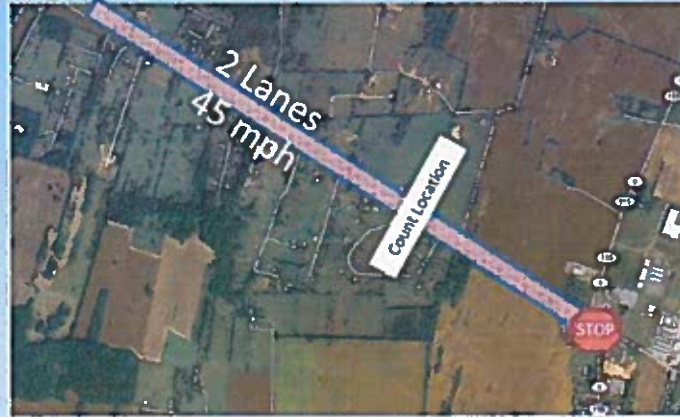
CORRIDOR DETAIL SHEETS

Corridor 19: Leetown Pike

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Lone Oak Road	4,000	0.17	-	9%
Intersection with Lone Wiltshire Road	4,400	0.18	-	7%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
5,300 (33%)	0.37	-	4%
9,900 (125%)	0.68	-	2%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
7,300 (83%)	0.53	-	3%
16,500 (275%)	1.02	530	1%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
		X	X	

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Mildred St & Leetown Pike Intersection Improvement	Increase Capacity along Rt 115	Yes

CORRIDOR DETAIL SHEETS

Corridor 20: Currie Lane



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPII)	% Thru UGB Traffic
Intersection with Rt 9 Ramp	2,500	0.50	-	0%

Projected 2020

Projected Volume (growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
11,300	1.80	1,250	0%

Projected 2035

Projected Volume (growth)	Peak V/C	Excess Demand (VPII)	% of Thru UGB Traffic
22,400	2.68	2,350	0%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
	X	X	X	

Identified Projects

Project Name	Project Impact on Corridor	Identified During IITP Process
Currie Road Widening	Increase Capacity along Currie Road	Yes

CORRIDOR DETAIL SHEETS

Corridor 21: Co Route 8 / Brown Shop Road

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Leetown Pike	1,800	0.14	-	2%
Intersection with Rt 9 Ramp	1,800	0.12	-	1%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
4,100 (128%)	0.85	60	1%
5,200 (189%)	0.81	20	0%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
7,700 (328%)	1.21	510	0%
8,800 (389%)	1.20	600	0%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
		X	X	

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTP Process
Brown Shop Rd Intersection Improvements	Possible addition of turn lanes or signalization	No (From this Study)

CORRIDOR DETAIL SHEETS

Corridor 22: Flowing Springs Road

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Daniel Rd	5,000	0.21	-	9%
Intersection with Shenandoah Junction Rd	5,000	0.21	-	22%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
6,000 (20%)	0.82	50	10%
6,700 (34%)	0.91	260	25%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
7,900 (58%)	0.86	140	9%
9,700 (94%)	0.97	410	23%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
X				

Identified Projects

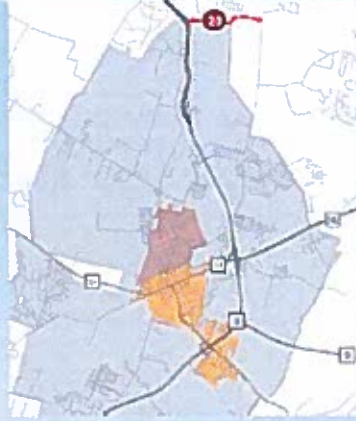
Project Name	Project Impact on Corridor	Identified During LRTP Process
No Projects Identified; Projected congestion near thresholds, no major intersections in UGB		

CORRIDOR DETAIL SHEETS



Corridor 23: Shenandoah Junction Road

Project Location



Corridor Details



Existing Conditions

Location	Daily Volume	Peak V/C	Excess Demand (VPH)	% Thru UGB Traffic
Intersection with Flowing Springs Rd	2,300	0.14	-	77%
Intersection with Charles Town Rd	2,300	0.14	-	40%

Projected 2020

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
3,800 (65%)	1.88	1,840	59%
3,600 (57%)	1.26	780	37%

Projected 2035

Projected Volume (Growth)	Peak V/C	Excess Demand (VPH)	% of Thru UGB Traffic
7,000 (204%)	1.86	1,800	39%
5,900 (157%)	1.43	1,070	35%

Applicable Improvements

No Improvements Needed	Add "Thru" Lanes	Intersection Turn Lanes	Signal / Coordination	Other
		X	X	

Identified Projects

Project Name	Project Impact on Corridor	Identified During LRTIP Process
Shenandoah Intersection Improvements	Possible addition of turn lanes or signalization	No (From this Study)

CORRIDOR DETAIL SHEETS



APPENDIX C: COMPLETE STREETS POLICY – NATIONAL COMPLETE STREETS COALITION



NATIONAL COMPLETE STREETS COALITION
1707 L ST NW, SUITE 250 • WASHINGTON DC 20036

www.completestreets.org • p: 202-955-5543 • f: 202-955-5592 • e: info@completestreets.org

ELEMENTS OF AN IDEAL COMPLETE STREETS POLICY

Regardless of a policy's form, the National Complete Streets Coalition has identified ten elements of a comprehensive complete streets policy, as discussed below. For examples of strong policy language, see our current chart of selected policies: <http://www.completestreets.org/webdocs/policy/cs-chart-samplepolicy.pdf>

- Includes a vision for how and why the community wants to complete its streets
- Specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is adoptable by all agencies to cover all roads.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs.
- Directs that complete streets solutions will complement the context of the community.
- Establishes performance standards with measurable outcomes.
- Includes specific next steps for implementation of the policy

Sets a vision

A strong vision can inspire a community to follow through on its complete streets policy. Just as no two policies are alike, visions are not one-size-fits-all either. In the small town of Decatur, GA, the Community Transportation Plan defines their vision as promoting health through physical activity and active transportation. In the City of Chicago, the Department of Transportation focuses on creating streets safe for travel by even the most vulnerable - children, older adults, and those with disabilities.

Specifies all users

A true complete streets policy must apply to everyone traveling along the road. A sidewalk without curb ramps is useless to someone using a wheelchair. A street with an awkwardly placed public transportation stop without safe crossings is dangerous for riders. A fast-moving road with no safe space for cyclists will discourage those who depend on bicycles for transportation. A road with heavy freight traffic must be planned with those vehicles in mind. Older adults and children face particular challenges as they are more likely to be seriously injured or killed along a roadway. Automobiles are an important part of a complete street as well, as any change made to better

accommodate other modes will have an effect on personal vehicles too. In some cases, like the installation of curb bulb-outs, these changes can improve traffic flow and the driving experience.

Creates a network

Complete streets policies should result in the creation of a complete transportation network for all modes of travel. A network approach helps to balance the needs of all users. Instead of trying to make each street perfect for every traveler, communities can create an interwoven array of streets that emphasize different modes and provide quality accessibility for everyone. This can mean creating bicycle boulevards to speed along bicycle travel on certain low-traffic routes; dedicating more travel lanes to bus travel only; or pedestrianizing segments of routes that are already overflowing with people on foot. It is important to provide basic safe access for all users regardless of design strategy and networks should not require some users to take long detours.

All agencies and all roads

Creating complete streets networks is difficult because many agencies control our streets. They are built and maintained by state, county, and local agencies, and private developers often build new roads. Typical complete streets policies cover only one jurisdiction's roadways, which can cause network problems: a bike lane on one side of a bridge disappears on the other because the road is no longer controlled by the agency that built the lane. Another common issue to resolve is inclusion of complete streets elements in sub-division regulations, which govern how private developers build their new streets.

All projects

For many years, multi-modal streets have been treated as 'special projects' requiring extra planning, funding, and effort. The complete streets approach is different. Its intent is to view all transportation improvements as opportunities to create safer, more accessible streets for all users, including pedestrians, cyclists, and public transportation passengers. Under this approach, even small projects can be an opportunity to make meaningful improvements. In repaving projects, for example, an edge stripe can be shifted to create more room for cyclists. In routine work on traffic lights, the timing can be changed to better accommodate pedestrians walking at a slower speed. A strong complete streets policy will integrate complete streets planning into all types of projects, including new construction, reconstruction, rehabilitation, repair, and maintenance.

Exceptions

Making a policy work in the real world requires developing a process to handle exceptions to providing for all modes in each project. The Federal Highway Administration's guidance on accommodating bicycle and pedestrian travel named three exceptions that have become commonly used in complete streets policies: 1) accommodation is not necessary on corridors where non-motorized use is prohibited, such as interstate freeways; 2) cost of accommodation is excessively disproportionate to the need or probable use; 3) a documented absence of current or future need. Many communities have included their own exceptions, such as severe topological constraints. In addition to defining exceptions, there must be a clear process for granting them, where a senior-level department head must approve them. Any exceptions should be kept on record and publicly-available.

Design criteria

Communities adopting a complete streets policy should review their design policies to ensure their ability to accommodate all modes of travel, while still providing flexibility to allow designers to tailor the project to unique circumstances. Some communities will opt to re-write their design manual. Others will refer to existing design guides, such as those issued by AASHTO, state design standards, and the Americans with Disabilities Act Accessibility Guidelines.

Context-sensitive

An effective complete streets policy must be sensitive to the community context. Being clear about this in the initial policy statement can allay fears that the policy will require inappropriately wide



roads in quiet neighborhoods or miles of little-used sidewalks in rural areas. A strong statement about context can help align transportation and land use planning goals, creating livable, strong neighborhoods.

Performance measures

The traditional performance measure for transportation planning has been vehicular Level of Service (LOS) – a measure of automobile congestion. Complete streets planning requires taking a broader look at how the system is serving all users. Communities with complete streets policies can measure success through a number of ways: the miles of on-street bicycle routes created; new linear feet of pedestrian accommodation; changes in the number of people using public transportation, bicycling, or walking (mode shift); number of new street trees; and/or the creation or adoption of a new multi-modal Level of Service standard that better measures the quality of travel experience. The fifth edition of Highway Capacity Manual will include this new way of measuring LOS. Cities like San Francisco and Charlotte have already begun to develop their own.

Implementation

Taking a complete streets policy from paper into practice is not easy, but providing some momentum with specific implementation steps can help. Some policies establish a task force or commission to work toward policy implementation. There are four key steps for successful implementation: 1) Restructure procedures to accommodate all users on every project; 2) Develop new design policies and guides; 3) Offer workshops and other training opportunities to planners and engineers; and 4) Institute better ways to measure performance and collect data on how well the streets are serving all users.



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APPENDIX D: SAMPLE FEE STRUCTURE SUMMARY HANDOUT

SEE FOLLOWING SHEETS

Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)



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Attachment: 20200623 - Written Comments - Packet #10 (1685 : Ordinance #2017-302)

Ranson and Charles Town Transportation Development Fee Overview



Introduction

The Cities of Ranson and Charles Town, West Virginia, effective **Date**, have established a transportation development fee for areas within its urban growth boundary. With limited state funding available for local transportation improvements, a transportation-specific development fee has been identified as a method to assist in funding key transportation infrastructure improvements that would support regional access and reduce congestion. The transportation development fees would be implemented as municipal fees as enabled by West Virginia Code §8-13-13, which provides that every municipality has the plenary power and authority to impose an ordinance fee to support municipal services including the maintenance and improvement of streets within its jurisdiction.

Transportation Development Fee

A fee structure has been developed as part of a technical fee study that includes estimates of future transportation project needs and an allocation of project costs to new development. Fees have been developed for different land use type groupings based on categories within the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. An "Other" category has been included for developments that do not fall into the given categories. The maximum development fees that can be charged to future development are as follows:

Maximum Development Fees

Land Use Category	Unit	Daily Trip End Cost	Fee (\$)
Single-Family	Dwelling Unit	\$370	\$3,254
Multi-Family	Dwelling Unit	\$370	\$1,976
Retail	1,000 Square Feet	\$166	\$2,943
Office	1,000 Square Feet	\$166	\$1,677
Industrial	1,000 Square Feet	\$166	\$1,061
Warehouse	1,000 Square Feet	\$166	\$542
Other	1,000 Square Feet	\$166	\$1,199

Fee Credits

Credits are available to reduce transportation development fees. The credits include:

Fee Credits

Category	Credit
Mixed Use Development	30%
Traditional Neighborhood Development (TND)	50%
Livable Community Improvements	10%
Right-of-Way Property Donation	\$ Credit
Transportation Project Construction	\$ Credit

The mixed use and TND development must be consistent with the definitions contained in the zoning ordinances in both cities. Livable community improvements require the construction of an off-road internal bike and pedestrian network, a connection to the nearest arterial roadway, a connection to nearby commercial /retail /park /school /or transit station, and/or connections to other nearby existing shared-use paths. Other credit deductions can be based on the estimated cost of property donation or construction costs for regional capacity improvement projects that benefit regional congestion and traffic safety.

Exemptions

The following development is exempt from the transportation development fee:

- Existing dwelling units and non-residential buildings
- Re-development within existing buildings
- Low-income housing
- Brownfield development

Additional exemptions will be determined by each city in writing and subject to the appeal by the city council.

Fee Application Process

The transportation development fee will be determined using the following steps:

➤ **Step 1: Identify Development Type**

The developer will work with the city to identify the appropriate development type and characteristics.

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Ranson and Charles Town Transportation Development Fee Overview



➤ **Step 2: Exemptions**

The city will determine if the development is exempt from the transportation development fees. Exemptions outside of those presented above will be required in writing with approval from city council.

➤ **Step 3: Correspondence to Fee Land Use Categories**

The developer and city will work to identify what land use categories within the fee structure are applicable to each development type. The fee study provides detailed definitions of the categories.

➤ **Step 4: Maximum Development Fee**

A maximum per unit fee will be determined from the fee table. A developer cannot be charged more than this per unit fee. In cases, where there are no fee credits or adjustments, the maximum fee will be applied to the number of development units.

➤ **Step 5: Fee Credits**

Reductions in fees will be estimated based on the fee credits applicable to the development. The city will review credit applications to ensure they meet applicable criteria.

➤ **Step 6: Fee Modifications**

If in the judgment of the city, none of the fee categories or fee amounts set forth in the fee structure accurately describe or capture the impacts of the new development on the transportation system, the city may ask the applicant to conduct independent fee calculations and the city may impose alternative fees on a specific development based on those calculations. The fee calculations may use the cost per trip end values presented in the fee structure table. The alternative fees and the calculations should be set forth in writing and shall be agreed upon by the city and fee payer. The documentation submitted shall show the basis upon which the independent fee calculation was made.

➤ **Step 7: Final City Reduction Percentages**

On an annual basis, each city will determine a fee reduction percentage to ensure that fees are reasonable and will not negatively affect regional growth and economic development. These fee reductions will be agreed upon and documented by each city council and applied fairly to all development applications.

Sample Development Fee Calculation

Sample Mixed-Use Development:

10 Single Family Homes
10,000 square feet Retail Space
5,000 square feet Office Space

Sample Fee calculations:

Residential		
Units	Unit Fee	Max Fee
10	\$3,254	\$32,540

Non-Residential		
Units (1,000 sq ft)	Unit Fee	Max Fee
10 Retail	\$2,943	\$29,430
5 Office	\$1,677	\$8,385

Total Maximum Fee	\$70,355
--------------------------	-----------------

Fee Credits (Mixed-Use)	
\$70,355 x -30%	(\$21,107)

Total Applicable Fee	\$49,248
-----------------------------	-----------------

Time of Fee Assessment

An applicant is required to pay the Transportation Development Fee prior to the issuance of a zoning certificate by each city. Payments may be made in either a lump sum payment or in a series of annual payments over a 5, 10, or 20 year payment schedule.

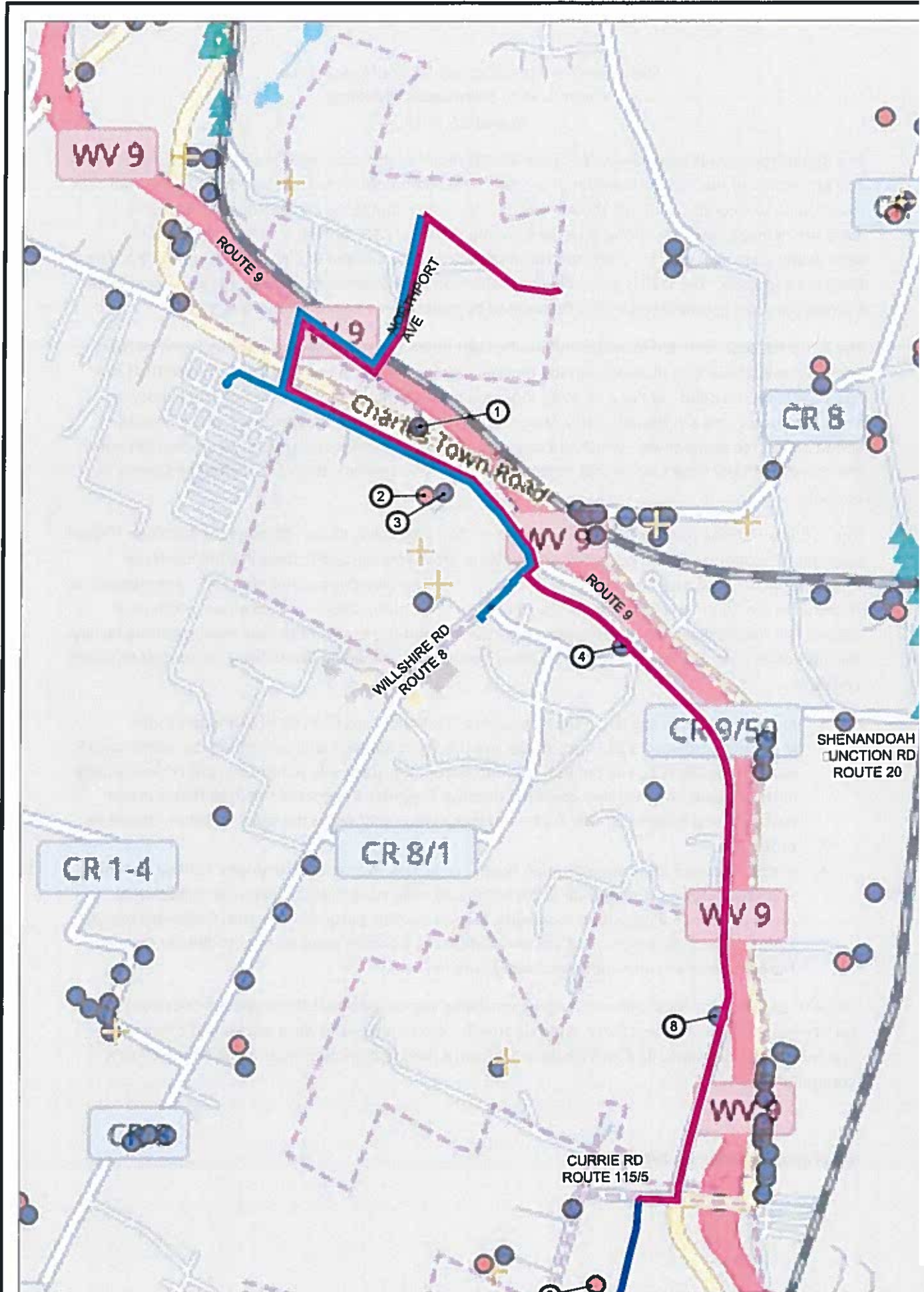
For More Information

The Transportation Development Fee Study is available for download at the following website: www.xxxxxx.com. For additional information, please contact:

Ranson:
 xxxxxxxx: (xxx) xxx-xxxx or
xxx.xxx@xxxxxx.com

Charles Town:
 xxxxxxxx: (xxx) xxx-xxxx or
xxx.xxx@xxxxxx.com

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Statement from the Appalachian Trail Conservancy
Harpers Ferry Town Council Meeting
August 22, 2018

The [Appalachian Trail Conservancy](#) (ATC) is a 43,000-member organization dedicated to the preservation and protection of the Appalachian National Scenic Trail. Commonly referred to as the A.T., the Trail runs from Maine to Georgia, spanning the Appalachian Mountain Range for 2,190 miles. The Trail and its lands are managed under a cooperative partnership between ATC, 31 Trail maintaining clubs, and federal and state agencies, including the National Park Service and the U.S. Forest Service. As the “Great Eastern Landscape,” the Trail is something that offers an irreplaceable connection to the natural world. Current numbers estimate the Trail is frequented by more than 3 million people every year.

The ATC’s headquarters are in Jefferson County, right down the street here in Harpers Ferry. Harpers Ferry is a special place to those who enjoy the Appalachian Trail. The town is often referred to as the “psychological midpoint” of the A.T., even though the actual midpoint is further north in Pennsylvania. Yet when hikers arrive in Harpers Ferry, they celebrate a milestone in their journey. Many choose to spend extra time in the town—which is a designated [Appalachian Trail Community](#)—where they enjoy the scenic and historic resources that make Harpers Ferry so special—that make Jefferson County so special.

The A.T. has a strong presence in the tri-state area. The Trail winds its way through the Northern Virginia counties of Loudoun and Clarke; Jefferson County in West Virginia; and it straddles the border of Washington and Frederick Counties in Maryland. Those who hike this portion of the A.T. are exposed to 45 miles of the Trail—miles that feature scenic, natural, cultural, historic and community-oriented values. The Appalachian Trail Conservancy is concerned about the new Rockwool manufacturing facility because of its potential impacts to those values. Specifically, we would like to bring awareness to these concerns:

- Along the 45-mile stretch of the Appalachian Trail that runs from Northern Virginia into Maryland, Rockwool’s 213-foot stacks and the lights on them will, potentially, be seen from 15 vistas along the A.T.; and pollutants emitted from the stack will, potentially, affect the visibility at these vistas. Why is this a concern? Because Congress designated this Trail that is in our backyard as a National Scenic Trail—and those views that make this area so special should be protected.
- We also have to think about human health, especially in an area that prides itself on outdoor recreation. Hikers who hike all or part of this 45-mile stretch will be exposed to Rockwool pollutants - including carbon monoxide, carbon dioxide, particulate matter, formaldehyde and sulfur dioxide - since the wind will blow emissions from the plant southeast directly through Harpers Ferry and into Loudoun County, Virginia.

The ATC supports the local community concerns being expressed about the proposed Rockwool facility—especially in Harpers Ferry, which is an A.T. Community—and we stand behind those who continue to ask questions and look for answers from a manufacturing company that bills itself as a community partner.

Read by Anne Baker on 8/22/19

AMERICAN ACADEMY OF PEDIATRICS

POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children

Committee on Environmental Health

Ambient Air Pollution: Health Hazards to Children

ABSTRACT. Ambient (outdoor) air pollution is now recognized as an important problem, both nationally and worldwide. Our scientific understanding of the spectrum of health effects of air pollution has increased, and numerous studies are finding important health effects from air pollution at levels once considered safe. Children and infants are among the most susceptible to many of the air pollutants. In addition to associations between air pollution and respiratory symptoms, asthma exacerbations, and asthma hospitalizations, recent studies have found links between air pollution and preterm birth, infant mortality, deficits in lung growth, and possibly, development of asthma. This policy statement summarizes the recent literature linking ambient air pollution to adverse health outcomes in children and includes a perspective on the current regulatory process. The statement provides advice to pediatricians on how to integrate issues regarding air quality and health into patient education and children's environmental health advocacy and concludes with recommendations to the government on promotion of effective air-pollution policies to ensure protection of children's health. *Pediatrics* 2004;114:1699-1707; *air pollution, adverse effects, children, asthma, environmental health.*

ABBREVIATIONS. PM_{2.5}, particulate matter with a median aerodynamic diameter less than 2.5 μm; PM₁₀, particulate matter with a median aerodynamic diameter less than 10 μm; EPA, Environmental Protection Agency; HAP, hazardous air pollutant; AQI, air quality index.

INTRODUCTION

Although it has been 3 decades since passage of the Clean Air Act in 1970 (Pub L No. 91-604), the air in many parts of the United States is far from clean. Air quality has improved in some areas but decreased in others.¹ In addition, there are important health effects from air pollutants at levels once considered safe. Children and infants are among the most susceptible to many of the air pollutants.

In 2002, approximately 146 million Americans were living in areas where monitored air failed to meet the 1997 National Ambient Air Quality Standards for at least 1 of the 6 "criteria air pollutants": ozone, particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead (Table 1).¹ Although the standards for ozone and particulate matter were revised in 1997, legal barriers have delayed

timely implementation.² Recent reports have identified adverse health effects at levels near or below the current standards for ozone, particulate matter, and nitrogen dioxide. Thus, the 1997 federal standards may not adequately protect children. Additionally, numerous other toxic air pollutants are of public health concern.³

Outdoor air pollution is also a major problem in developing countries. The World Health Organization found that the air quality in large cities in many developing countries is remarkably poor and that very large numbers of people in those countries are exposed to ambient concentrations of air pollutants well above the World Health Organization guidelines for air quality (www.who.int/ceh/publications/en/11airpollution.pdf).

Scientific understanding of the health effects of air pollution, including effects on children, has increased in the last decade. This statement updates a 1993 American Academy of Pediatrics (AAP) statement titled "Ambient Air Pollution: Respiratory Hazards to Children."⁴

EFFECTS OF AIR POLLUTION ON CHILDREN

Children are more vulnerable to the adverse effects of air pollution than are adults. Eighty percent of alveoli are formed postnatally, and changes in the lung continue through adolescence.⁵ During the early postneonatal period, the developing lung is highly susceptible to damage after exposure to environmental toxicants.⁵⁻⁷

Children have increased exposure to many air pollutants compared with adults because of higher minute ventilation and higher levels of physical activity.⁸ Because children spend more time outdoors than do adults, they have increased exposure to outdoor air pollution.^{9,10}

Infants, children, the elderly, and those with cardiopulmonary disease are among the most susceptible to adverse health effects from criteria pollutants.¹¹⁻¹⁵ Lead is neurotoxic, especially during early childhood. Carbon monoxide interferes with oxygen transport through the formation of carboxyhemoglobin. Other criteria pollutants (ozone, sulfur dioxide, particulate matter, nitrogen dioxide) have respiratory effects in children and adults, including increased respiratory tract illness, asthma exacerbations, and decreased lung function (eg, changes in peak flow).¹¹⁻¹² In adults, particulate air pollution is associated with respiratory and cardiovascular hos-

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PEDIATRICS (ISSN 0031-4005). Copyright © 2004 by the American Academy of Pediatrics.

TABLE 1. National Ambient Air Quality Standards for Criteria Air Pollutants, 1997

Pollutant	Primary Standards*
Ozone	
1-h average	0.12 ppm (235 $\mu\text{g}/\text{m}^3$)
8-h average	0.08 ppm (157 $\mu\text{g}/\text{m}^3$)
PM₁₀	
Annual arithmetic mean	50 $\mu\text{g}/\text{m}^3$
24-h average	150 $\mu\text{g}/\text{m}^3$
PM_{2.5}	
Annual arithmetic mean	15 $\mu\text{g}/\text{m}^3$
24-h average	65 $\mu\text{g}/\text{m}^3$
Sulfur dioxide	
Annual arithmetic mean	0.03 ppm (80 $\mu\text{g}/\text{m}^3$)
24-h average	0.14 ppm (365 $\mu\text{g}/\text{m}^3$)
Nitrogen dioxide	
Annual arithmetic mean	0.053 ppm (100 $\mu\text{g}/\text{m}^3$)
Carbon monoxide	
8-h average	9 ppm (10 mg/m ³)
1-h average	35 ppm (40 mg/m ³)
Lead	
Quarterly average	1.5 $\mu\text{g}/\text{m}^3$

Additional information on air quality standards are available at www.epa.gov/air/criteria.html.

* People residing in regions with pollutant concentrations above the primary standard may experience adverse health effects from poor air quality.

pitalizations, cardiovascular mortality,¹⁶ and lung cancer.¹⁷ Air pollution also has effects on indirect health indicators such as health care utilization and school absences.¹¹⁻¹³

Although numerous studies have shown that outdoor air pollution exacerbates asthma, the effect of outdoor air pollution on the development of asthma has been less clear. Recently, a prospective study found that the risk of developing asthma was not greater, overall, in children living in communities with high levels of ozone or particulate air pollution. However, in communities with high levels of ozone, there was an increased risk of developing asthma in a small subset of children involved in heavy exercise (participation in 3 or more team sports per year [relative risk: 3.3; 95% confidence interval: 1.9-5.8]). This increased risk with heavy exercise was not seen in low-ozone communities. Time spent outside was also associated with new cases of asthma in high-ozone communities (relative risk: 1.4; 95% confidence interval: 1.0-2.1) but not in low-ozone communities.¹⁸ Additional studies are needed to define the role of outdoor air pollution in the development of asthma.

Children in communities with higher levels of urban air pollution (acid vapor, nitrogen dioxide, particulate matter with a median aerodynamic diameter less than 2.5 μm [PM_{2.5}], and elemental carbon [a component of diesel exhaust]) had decreased lung function growth, and children who spent more time outdoors had larger deficits in the growth rate of lung function.^{19,20} Ambient air pollution (especially particulate matter with a median aerodynamic diameter less than 10 μm [PM₁₀]) has also been associated with several adverse birth outcomes, as discussed in the next section.

Levels of ozone and particulate matter are high enough in many parts of the United States to present health hazards to children.¹ Additionally, National

Ambient Air Quality Standards for nitrogen dioxide may not be protective. Findings on these pollutants are summarized here.

Ozone

Ambient ozone is formed by the action of sunlight on nitrogen oxides and reactive hydrocarbons, both of which are emitted by motor vehicles and industrial sources. The levels tend to be highest on warm, sunny, windless days and often peak in midafternoon, when children are most likely to be playing outside.

Ozone is a powerful oxidant and respiratory tract irritant in adults and children, causing shortness of breath, chest pain when inhaling deeply, wheezing, and cough.¹¹ Children have decreases in lung function, increased respiratory tract symptoms, and asthma exacerbations on days with higher levels of ambient ozone.^{11,21-23} Increases in ambient ozone have been associated with respiratory or asthma hospitalizations,^{24,25} emergency department visits for asthma,²⁶ and school absences for respiratory tract illness.²⁷ In Atlanta, Georgia, summertime children's emergency department visits for asthma increased 37% after 6 days when ozone levels exceeded 0.11 ppm.²⁵ In southern California, school absences for respiratory tract illness increased 63% in association with a 0.02-ppm increase in ozone.²⁷

In healthy adults, ozone causes airway inflammation and hyperreactivity, decrements in pulmonary function, and increased respiratory tract symptoms.¹¹ Ozone exposures at concentrations of 0.12 ppm or higher can result in decrements in lung function after subsequent challenge with aeroallergen.²⁸ Although most of the controlled studies of ozone exposure have been performed with adults, it is reasonable to believe that the results of these findings could be extended to children.

Ozone may be toxic at concentrations lower than 0.08 ppm, the current federal regulatory standard. Field studies suggest potential thresholds of between 0.04 and 0.08 ppm (1-hour average) for effects on lung function.²⁹⁻³¹ Recent studies of hospitalizations for respiratory tract illness in young children and emergency department visits for asthma suggest that the effects of ozone may occur at ambient concentrations below 0.09 ppm.^{32,33} Another study found associations of ozone and respiratory symptoms in children with asthma at levels below the current US Environmental Protection Agency (EPA) standards.³⁴ If these findings are confirmed, the ozone standards may need additional revision.

In addition to studies on short-term effects, 2 recent studies of college freshmen suggest that increasing cumulative childhood exposure to ozone may affect lung function when exposed children reach young adulthood, particularly in measures of flow in small airways.^{35,36} Early childhood exposures may, therefore, be particularly important.³⁵

Particulate Matter

PM₁₀ is small enough to reach the lower respiratory tract and has been associated with a wide range of serious health effects. PM₁₀ is a heterogeneous

mixture of small solid or liquid particles of varying composition found in the atmosphere. Fine particles (PM_{2.5}) are emitted from combustion processes (especially diesel-powered engines, power generation, and wood burning) and from some industrial activities. Coarse particles (diameter between 2.5 and 10 μm) include windblown dust from dirt roads or soil and dust particles created by crushing and grinding operations. Toxicity of particles may vary with composition.^{37,38}

Particle pollution contributes to excess mortality and hospitalizations for cardiac and respiratory tract disease.^{14,39–41} The mechanism for particulate matter-associated cardiac effects may be related to disturbances in the cardiac autonomic nervous system, cardiac arrhythmias, or increased blood concentrations of markers of cardiovascular risk (eg, fibrinogen).^{16,42}

Daily changes in mortality rates and numbers of people hospitalized are linked to changes in particulate air pollution.^{14,39–41} These studies and others have estimated that for every 10 μg/m³ increase in PM₁₀, there is an increase in the daily mortality rate between 0.5% and 1.6%. Effects were seen even in cities with mean annual PM₁₀ concentrations between 25 and 35 μg/m³. These recent studies suggest that even the current federal standards for PM_{2.5} (24-hour standard = 65 μg/m³; annual standard = 15 μg/m³) and PM₁₀ (24-hour standard = 150 μg/m³; annual standard = 50 μg/m³) should be lowered to protect public health. In 2002, California adopted more stringent standards for particulate matter: the annual average standard for PM_{2.5} is 12 μg/m³ and for PM₁₀ is 20 μg/m³.⁴³

In children, particulate pollution affects lung function^{44–46} and lung growth.¹⁹ In a prospective cohort of children living in southern California, children with asthma living in communities with increased levels of air pollution (especially particulates, nitrogen dioxide, and acid vapor) were more likely to have bronchitis symptoms. In this study, bronchitis symptoms refers to a parental report of “one or more episodes of ‘bronchitis’ in the past 12 months” or report that, “apart from colds, the child usually seems to be congested in the chest or able to bring up phlegm”.⁴⁷ The same mix of air pollutants was also associated with deficits in lung growth (as measured by lung function tests).¹⁹ Recent studies in different countries have also found associations between ambient air pollution (especially particulates and/or carbon monoxide) and postneonatal infant mortality (attributable to respiratory causes and possibly sudden infant death syndrome),^{48,49} low birth weight,^{50–53} and preterm birth.^{51,54–56}

The relative contribution of fine versus coarse particles to adverse health effects is being investigated. In studies of cities on the East Coast, fine particles seem to be important.⁵⁷ In other areas, coarse particles have a stronger or similar effect.⁵⁸ Several studies have found that fine particles from power plants and motor vehicles⁵⁹ or industrial sources⁶⁰ may be more closely associated with mortality.

Nitrogen Dioxide

Nitrogen dioxide is a gaseous pollutant produced by high-temperature combustion. The main outdoor sources of nitrogen dioxide include diesel and gasoline-powered engines and power plants. Levels of nitrogen dioxide around urban monitors have decreased over the past 20 years. Currently, all areas of the country meet the national air quality standard for nitrogen dioxide of 0.053 ppm (100 μg/m³), measured as an annual arithmetic mean. However, national emissions (overall production) of nitrogen oxides have actually increased in the past 20 years because of an increase in nitrogen oxide emissions from diesel vehicles.¹ This increase is of concern, because nitrogen oxide emissions contribute to ground-level ozone (smog) and other environmental problems such as acid rain.¹

Controlled-exposure studies of people with asthma have found that short-term exposures (30 minutes) to nitrogen dioxide at concentrations as low as 0.26 ppm can enhance the allergic response after subsequent challenge with allergens.^{61,62} These findings are of concern, because some urban communities that are in compliance with the federal standards for nitrogen dioxide (annual average) may experience substantial short-term peak concentrations (1-hour average) that exceed 0.25 ppm. Confirmation of these studies is needed.

Epidemiologic studies have reported relationships between increased ambient nitrogen dioxide and risks of respiratory tract symptoms^{63,64} and asthma exacerbations.⁶⁵ As noted previously, children with asthma living in communities with increased levels of air pollution (especially nitrogen dioxide, acid vapor, and particulates) were more likely to have bronchitis symptoms.⁴⁷ The same mix of air pollutants was also associated with deficits in lung growth (as measured by lung function tests).¹⁹ These effects were increased in children who spent more time outdoors.

The epidemiologic studies of health effects associated with nitrogen dioxide should be interpreted with caution. Increased levels of ambient nitrogen dioxide may be a marker for exposure to traffic emissions or other combustion-related pollution. An independent role of nitrogen dioxide cannot be clearly established because of the high covariation between ambient nitrogen dioxide and other pollutants. Nonetheless, these studies illustrate that adverse respiratory tract effects are seen in urban areas where traffic is a dominant source of air pollution.

Traffic-Related Pollution

Motor vehicles pollute the air through tailpipe exhaust emissions and fuel evaporation, contributing to carbon monoxide, PM_{2.5}, nitrogen oxides, hydrocarbons, other hazardous air pollutants (HAPs), and ozone formation. Motor vehicles represent the principal source of air pollution in many communities, and concentrations of traffic pollutants are greater near major roads.⁶⁶ Recently, investigators (primarily in Europe and Japan) have found increased adverse health effects among those living near busy roads.

Studies examining associations between adverse respiratory tract health and traffic have been reviewed.⁶⁷ Increased respiratory tract complications in children (eg, wheezing, chronic productive cough, and asthma hospitalizations) have been associated with residence near areas of high traffic density (particularly truck traffic).⁶⁸⁻⁷¹ Other investigators have linked various childhood cancers to proximity to traffic.⁷²⁻⁷⁴

Diesel exhaust, a major source of fine particulates in urban areas, is carcinogenic. Numerous studies have found an association between occupational exposure to diesel exhaust and lung cancer.⁷⁵ On the basis of extensive toxicologic and epidemiologic evidence, national and international health authorities, including the EPA and the International Agency for Research on Cancer, have concluded that there is considerable evidence of an association between exposure to diesel exhaust and an increased risk of lung cancer.^{76,77} Additionally, fine particles in diesel exhaust may enhance allergic and inflammatory responses to antigen challenge and may facilitate development of new allergies.^{78,79} Thus, diesel exhaust exposure may worsen symptoms in those with allergic rhinitis or asthma.

School buses operate in proximity to children, and most of the nation's school bus fleets run on diesel fuel. The EPA and some state agencies are establishing programs to eliminate unnecessary school bus idling and to promote use of cleaner buses to decrease children's exposures to diesel exhaust and the amount of air pollution created by diesel school buses (www.epa.gov/cleanschoolbus). A recent pilot study found that a child riding inside a school bus may be exposed to as much as 4 times the level of diesel exhaust as someone riding in a car.⁸⁰ These findings underscore the importance of advocating for school districts to replace diesel buses or retrofit them with pollution-reducing devices and limit school bus idling where children congregate as soon as possible.

Other Air Pollutants

Airborne levels of lead, sulfur dioxide, and carbon monoxide have decreased dramatically because of the implementation of control measures. However, levels of these pollutants may still be high near major sources. For example, high lead levels may be found near metals-processing industries, high sulfur dioxide levels may occur near large industrial facilities (especially coal-fired power plants), and high levels of carbon monoxide may occur in areas with heavy traffic congestion.¹

In addition to criteria air pollutants, there are numerous other air pollutants produced by motor vehicles, industrial facilities, residential wood combustion, agricultural burning, and other sources that are hazardous to children. More than 50,000 chemicals are used commercially, and many are released into the air. For most of these chemicals, data on toxicity are sparse.⁸¹ Some pollutants remain airborne or react in the atmosphere to produce other harmful substances. Other air pollutants deposit into and contaminate land and water. Some toxic air pollutants

such as lead, mercury, and dioxins degrade slowly or not at all. These pollutants may bioaccumulate in animals at the top of the food chain, including humans. Children can be exposed to toxic air pollutants through contaminated air, water, soil, and food.³ One example of a persistent pollutant emitted into ambient air that leads to exposure through another route is mercury, a developmental neurotoxicant.⁸² Industrial emissions, especially from coal-fired power plants, are the leading source of environmental mercury. Although the levels of airborne mercury may not be hazardous, mercury deposits into soil and surface waters and ultimately accumulates in fish.⁸²

The HAPs, often referred to as "toxic air contaminants" or "air toxics," refer to 188 pollutants and chemical groups known or suspected to cause serious health effects including cancer, birth defects, and respiratory tract and neurologic illness.^{3,83} The Clean Air Act directs the EPA to regulate HAPs, which include compounds such as polycyclic aromatic hydrocarbons, acrolein, and benzene from fuel or fuel combustion; solvents such as hexane and toluene; hexavalent chromium from chrome-plating facilities; perchloroethylene from dry-cleaning plants; asbestos; metals (eg, mercury and cadmium); and persistent organic pollutants such as polychlorinated biphenyls. In 2001, diesel exhaust was listed as a mobile-source HAP. Many of these compounds are included in a priority list of 33 HAPs that are of special concern because of their widespread use and potential carcinogenicity and teratogenicity.⁸¹ The priority list and general sources of these compounds are available on the EPA Web site (www.epa.gov/ttn/atw/nata).

Limited monitoring data suggest that concentrations of some HAPs may exceed the goals of the Clean Air Act in many cities.⁸⁴ Mobile sources (on- and off-road vehicles) account for approximately half of the emissions³ but may contribute to 90% of the cancer risk (www.scorecard.org/env-releases/hap/us.tcl). A number of studies assessing health risks have found that estimated levels of some of the HAPs are a potential public health problem in many parts of the United States.^{3,84-86} For example, estimated concentrations of benzene, formaldehyde, and 1,3-butadiene may contribute to extra cases of cancer (at least 1 extra case per million population exposed) in more than 90% of the census tracts in the contiguous United States. Additionally, the most recent national cancer-risk assessment for HAPs (1996 data) did not include diesel exhaust in the risk estimates.³ The health risks may also be underestimated, because there is limited information on toxicity values for many of the HAPs,⁸⁷ and the risk models did not consider the potential for increased risk in children. These findings underscore the need for better ways to decrease toxic air emissions and assess exposures and risks.

Air-pollution episodes created by disasters (eg, accidents, volcanoes, forest fires, and acts of terrorism) can also create hazards for children. A discussion of these events and of bioaerosols in ambient air (eg, fungal spores and pollen) is beyond the scope of this

policy statement. Additionally, this statement does not address the hazards of indoor air pollution.

PREVENTION

Public health interventions to improve air quality can improve health at the population level. A decrease in levels of air pollution in former East Germany after reunification was associated with a decrease in parent-reported bronchitis⁸⁸ and improved lung function.⁸⁹ During the 1996 Summer Olympics in Atlanta, Georgia, extensive programs were implemented to improve mass transportation and decrease anticipated downtown traffic congestion. These programs were successful and were associated with a prolonged decrease in ozone pollution and significantly lower rates of childhood asthma visits during this period.⁹⁰ Closure of a steel mill in Utah Valley and resultant reductions in particulate matter were associated with a twofold decrease in hospitalizations for asthma in preschool children.^{91,92} Finally, lung function improved in children who moved away from communities with high particulate air pollution, compared with those who remained or moved to communities with comparable particulate air pollution.⁹³ These studies provide support for continued efforts to decrease air pollution and improve health via decreases in motor vehicle traffic and industrial emissions. Dietary factors may play a role in modulating the effects of air pollution in children. A recent study in Mexico City, Mexico, found that children with asthma given antioxidant supplements were less affected by ozone compared with a control group that did not receive supplementation.⁹⁴ Additional studies are needed to explore this issue further.

Air Pollution and the Regulatory Process

The Clean Air Act of 1970 mandated the EPA to establish the National Ambient Air Quality Standards (Table 1). Standards were set for criteria air pollutants because they are common, widespread, and known to be harmful to public health and the environment.^{11,12,83,95} The standards are reviewed every 5 years and set to protect public health, including the health of "sensitive" populations such as people with asthma, children, and the elderly. These standards are set without considering the costs of attaining these levels.

The standards for ozone and particulate matter were revised in 1997 on the basis of numerous scientific studies showing that the previous standards were not adequate to ensure health protection. Legal challenges were made by the American Trucking Associations, the US Chamber of Commerce, and other state and local business groups. However, the Supreme Court ultimately supported the EPA and ordered implementation of the standards.² Establishing implementation plans will be a lengthy process that will require the coordinated efforts of the EPA, state and local governments, and industry and environmental organizations.

Population exposures to toxic air contaminants may be of substantial public health concern.^{84,86} In contrast to criteria pollutants, monitoring of toxic air

contaminants is more limited. Exposures are estimated on the basis of reported emissions and may underestimate actual exposures.⁸⁷ The EPA is mandated to develop regulations through a lengthy process that first sets standards to control emissions on the basis of best-available technology. After maximum available control technology emission standards are established, the EPA must assess the risk remaining after emission decreases for the source take effect (residual risk).

To date, the EPA has focused primarily on establishing technology-based emission standards,³ and this has been a slow process for some sources (eg, mobile toxic air contaminants and mercury emissions). Nationwide, emissions of toxic air contaminants have dropped approximately 24% from baseline (1990–1993) because of regulation and voluntary decreases by industry. With the current plans for gradual fleet turnover and implementation of controls for motor vehicles and fuels, the EPA projects that toxic air-contaminant emissions from gasoline-powered and diesel mobile sources will not be decreased to 75% and 90% of baseline (1990–1993) levels, respectively, until the year 2020.³ However, major decreases could be more rapidly achieved simply from a prompt, wider application of existing technology.

Protecting populations from exposure to the harmful effects of air pollutants will require effective control measures. Industry (eg, coal-burning power plants, refineries, and chemical plants) and motor vehicles (both gasoline- and diesel-powered) are major sources of criteria pollutants and HAPs.^{11,12} For example, coal-fired power plants are important sources of nitrogen oxides (precursors of ozone), particulates, and sulfur dioxide and are the largest sources of mercury emission in the United States. Smaller sources such as dry cleaners, auto body shops, and wood-burning fireplaces can also affect air quality locally. Municipal and hospital waste incinerators release toxic air pollutants including mercury, lead, cadmium, and dioxin emissions. Depending on weather conditions and individual physicochemical properties, some pollutants can be carried by air currents to areas many miles from the source.

In numerous cities in the United States, the personal automobile is the single greatest polluter, because emissions from millions of vehicles on the road add up. Despite significant technologic advances that have led to tighter pollution control from vehicles, emissions vary substantially between vehicles, particularly between classes of vehicles, because of differences in fuel-economy standards set by regulatory agencies. For instance, the corporate average fuel-economy standards have less stringent fuel-economy requirements (average: 20.7 miles per gallon) for light-duty trucks, sport utility vehicles, and minivans, compared with passenger cars (average: 27.5 miles per gallon). The former group of vehicles tends to have higher emissions of air pollutants, higher fuel consumption, and higher emissions of greenhouse gases.^{96,97} Information on emissions and fuel-economy ratings for recent models and a

guide for choosing clean, fuel-efficient vehicles are available from the EPA Web site (www.epa.gov/greenvehicles/index.htm). The high levels of particulate emissions from diesel-powered buses and trucks must also be addressed. More than 70% of fine particle emissions from traffic are attributable to diesel-powered buses and trucks.

Driving a private car is probably a typical citizen's most "polluting" daily activity, yet in many cases, individuals have few alternative forms of transportation. Thus, urban planning and smart growth are imperative. Urban sprawl affects land use, transportation, and social and economic development and ultimately has important implications for public health.⁹⁸ Ways in which individuals can help to decrease air pollution are available at www.epa.gov/air/actions and www.arb.ca.gov/html/brochure/50things.htm.

Air Quality Index

The air quality index (AQI) provides local information on air quality and potential health concerns at the observed (or forecasted) levels of air pollution and can be a useful tool for educating families about local air quality and health.⁹⁹ The AQI is reported daily in metropolitan areas, often as part of local weather forecasts on television or radio or in newspapers. The AQI divides air-pollution levels into 6 categories of risk for 5 common pollutants (ozone, PM₁₀, nitrogen dioxide, carbon monoxide, and sulfur dioxide). Each category has a descriptive name reflecting levels of health concern (ranging from good through very hazardous), an associated color, and an advisory statement. Information about air quality in a specific area can be obtained from www.epa.gov/air/urbanair/index.html, www.scorecard.org, or www.weather.com. Although many states and local air districts actively forecast and disseminate health warnings, the challenge is to have people take actions to protect themselves and decrease activities that cause air pollution.

*Pediatric Environmental Health*¹⁰⁰ from the AAP provides additional information about the outdoor air pollutants and the use of the AQI.

CONCLUSIONS

Ambient air pollution has important and diverse health effects, and infants and children are among the most susceptible. Currently, levels of ozone and particulates remain unhealthful in many parts of the United States, and the current National Ambient Air Quality Standards may not protect the public adequately. There is a compelling need to move forward on efforts to ensure clean air for all.

The assurance of healthy air for children to breathe is beyond the control of an individual pediatrician, and there are no easy solutions. State chapters of the AAP, as well as individual members, can play an important role as advocates for children's environmental health. Areas of involvement might include working with community coalitions in support of strong pollution-control measures and informing local and national representatives and policy makers about the harmful effects of the environment on chil-

dren's health. Advocates for children's health are needed in discussions about land use and transportation issues. Pediatricians can also advocate for energy-saving (and pollution-minimizing) lifestyles to their patients' families, especially regarding vehicles driven.

In communities with poor air quality, pediatricians can play a role in educating children with asthma or other chronic respiratory tract disease and their families about the harmful effects of air pollution. Patients and families can be counseled on following the AQI to determine when local air-pollution levels pose a health concern. Ozone levels tend to be highest in the afternoon, and it may be possible to decrease children's exposure by scheduling strenuous outdoor activity earlier in the day.

As pediatricians become better informed about local air quality issues in their communities (eg, ozone, nearby industrial facilities, traffic, diesel buses, wood burning, etc), these local concerns can provide a starting point for discussion and education.

Pediatricians who serve as physicians for schools or for team sports should be aware of the health implications of pollution alerts to provide appropriate guidance to school and sports officials, particularly in communities with high levels of ozone.

RECOMMENDATIONS

1. The National Ambient Air Quality Standards are designed to protect the public. To achieve this, the following points should be addressed:
 - The revised standards for ozone and particulate matter adopted by the EPA in 1997 should be promptly implemented.
 - During implementation, the standards should not be weakened in any way that decreases the protection of children's health.
 - Because recent studies suggest that current standards for PM₁₀, PM_{2.5}, ozone, and nitrogen dioxide may not be protecting children, the standards should be promptly reviewed and revised.
 - Because the law requires that the most vulnerable groups be protected when setting or revising the air quality standards, the potential effects of air pollution on the fetus, infant, and child should be evaluated, and all standards should include a margin of safety for protection of children.
2. The current measures to protect children from exposures to HAPs are not effective and should be critically reevaluated. The EPA should focus on prompt implementation of the Clean Air Act Amendments of 1990 (Pub L No. 101-549) to decrease HAPs. Additional monitoring for HAPs should be undertaken to allow more accurate characterization of children's exposures to these compounds. Risk assessments for HAPs should be reviewed to ensure that goals are protective of children. Control measures that specifically protect children's health should be implemented.
3. States and local air districts with air quality concerns should actively implement forecasting and

dissemination of health warnings in ways that help people take actions to protect themselves and decrease activities that cause air pollution.

4. Children's exposure to diesel exhaust particles should be decreased. Idling of diesel vehicles in places where children live and congregate should be minimized. Ongoing programs to fund conversion of diesel school bus fleets to cleaner alternative fuels and technologies should be pursued.
5. Industrial emissions of mercury should be decreased.
6. Federal and state governments' policies should encourage reductions in mobile and stationary sources of air pollution, including increased support for mass transit, carpooling, retiring or retrofitting old power plants that do not meet current pollution-control standards, and programs that support marked improvements in fuel emissions of gasoline- and diesel-powered vehicles. Additionally, the development of alternative fuel fleets, low-sulfur diesel, and other "low-emission" strategies (eg, retrofit of existing diesel engines) should be promoted. Before promoting new alternative fuels, these alternative fuel sources should be critically evaluated and determined by governmental authorities to have a good safety profile.
7. The same overall fuel-economy standard should apply to all passenger vehicles. Programs that allow certain passenger vehicles to be exempt from the usual fuel-economy standards should be abolished.
8. City and land-use planning should encourage the design and redevelopment of communities to promote mass transit, carpooling, pedestrian walkways, and bicycle use.
9. Siting of school and child care facilities should include consideration of proximity to roads with heavy traffic and other sources of air pollution. New schools should be located to avoid "hot spots" of localized pollution.

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REFERENCES

1. US Environmental Protection Agency. Latest findings on national air quality: 2000 status and trends. Research Triangle Park, NC: Environmental Protection Agency; 2001. Publication No. EPA 454/K-01-002. Available at: www.epa.gov/airtrends/reports.html. Accessed August 8, 2003
2. US Environmental Protection Agency. Supreme Court upholds EPA position on smog, particulate rules [press release]. Available at: www.epa.gov/airlinks/rehear.htm. Accessed October 29, 2004
3. US Environmental Protection Agency. About air toxics, health and ecologic effects. Available at: www.epa.gov/air/toxicair/newtoxics.html. Accessed August 8, 2003
4. American Academy of Pediatrics, Committee on Environmental Health. Ambient air pollution: respiratory hazards to children. *Pediatrics*. 1993;91:1210-1213
5. Dietert RR, Etzel RA, Chen D, et al. Workshop to identify critical windows of exposure for children's health: immune and respiratory systems work group summary. *Environ Health Perspect*. 2000;108(suppl 3):483-490
6. Plopper CG, Fanucchi MV. Do urban environmental pollutants exacerbate childhood lung diseases? *Environ Health Perspect*. 2000;108:A252-A253
7. Pinkerton KE, Joad JP. The mammalian respiratory system and critical windows of exposure for children's health. *Environ Health Perspect*. 2000;108(suppl 3):457-462
8. Plunkett LM, Turnbull D, Rodricks JV. Differences between adults and children affecting exposure assessment. In: Guzelian PS, Henry CJ, Olin SS, eds. *Similarities and Differences Between Children and Adults: Implications for Risk Assessment*. Washington, DC: ILSI Press; 1992: 79-96
9. Wiley JA, Robinson JP, Piazza T, et al. *Activity Patterns of California Residents: Final Report*. Sacramento, CA: California Air Resources Board; 1991. Publication No. A6-177-33
10. Wiley JA, Robinson JP, Cheng YT, Piazza T, Stork L, Pladsen K. *Study of Children's Activity Patterns: Final Report*. Sacramento, CA: California Air Resources Board; 1991. Publication No. A733-149
11. American Thoracic Society, Committee of the Environmental and Occupational Health Assembly. Health effects of outdoor air pollution. Part 1. *Am J Respir Crit Care Med*. 1996;153:3-50
12. American Thoracic Society, Committee of the Environmental and Occupational Health Assembly. Health effects of outdoor air pollution. Part 2. *Am J Respir Crit Care Med*. 1996;153:477-498
13. Bates DV. The effects of air pollution on children. *Environ Health Perspect*. 1995;103(suppl 6):49-53
14. US Environmental Protection Agency. *Air Quality Criteria for Particulate Matter, Vol. II*. Research Triangle Park, NC: Environmental Protection Agency; 2001. Publication No. EPA/600/P-99/002bB
15. US Environmental Protection Agency. *Air Quality Criteria for Ozone and Related Photochemical Oxidants, Vol. III*. Research Triangle Park, NC: Environmental Protection Agency; 1996. Publication No. EPA/600/P-93/004a-cF
16. Dockery DW. Epidemiologic evidence of cardiovascular effects of particulate air pollution. *Environ Health Perspect*. 2001;109(suppl 4): 483-486
17. Pope CA III, Burnett RT, Thun MJ, et al. Lung cancer, cardiopulmonary mortality, and long-term exposure to fine particulate air pollution. *JAMA*. 2002;287:1132-1141
18. McConnell R, Berhane K, Gilliland F, et al. Asthma in exercising children exposed to ozone: a cohort study [published correction appears in: *Lancet*. 2002;359:896]. *Lancet*. 2002;359:386-391
19. Gauderman WJ, McConnell R, Gilliland F, et al. Association between air pollution and lung function growth in southern California children. *Am J Respir Crit Care Med*. 2000;162:1383-1390
20. Gauderman WJ, Gilliland GF, Vora H, et al. Association between air pollution and lung function growth in southern California children: results from a second cohort. *Am J Respir Crit Care Med*. 2002;166:76-84

21. Kinney PL, Thurston GD, Raizenne M. The effects of ambient ozone on lung function in children: a reanalysis of six summer camp studies. *Environ Health Perspect.* 1996;104:170-174
22. Thurston GD, Lippmann M, Scott MB, Fine JM. Summertime haze air pollution and children with asthma. *Am J Respir Crit Care Med.* 1997; 155:654-660
23. Ostro BD, Lipsett MJ, Mann JK, Braxton-Owens H, White MC. Air pollution and asthma exacerbations among African-American children in Los Angeles. *Inhal Toxicol.* 1995;7:711-722
24. Thurston GD, Ito K, Hayes CG, Bates DV, Lippmann M. Respiratory hospital admissions and summertime haze air pollution in Toronto, Ontario: consideration of the role of acid aerosols. *Environ Res.* 1994; 65:271-290
25. White MC, Etzel RA, Wilcox WD, Lloyd C. Exacerbations of childhood asthma and ozone pollution in Atlanta. *Environ Res.* 1994;65:56-68
26. Tolbert PE, Mulholland JA, MacIntosh DL, et al. Air quality and pediatric emergency room visits for asthma in Atlanta, Georgia, USA. *Am J Epidemiol.* 2000;151:798-810
27. Gilliland FD, Berhane K, Rappaport EB, et al. The effects of ambient air pollution on school absenteeism due to respiratory illnesses. *Epidemiology.* 2001;12:43-54
28. Molino NA, Wright SC, Katz I, et al. Effect of low concentration of ozone on inhaled allergen responses in asthmatic subjects. *Lancet.* 1991;338:199-203
29. Castillejos M, Gold DR, Damokosh AI, et al. Acute effects of ozone on the pulmonary function of exercising schoolchildren from Mexico City. *Am J Respir Crit Care Med.* 1995;152:1501-1507
30. Chen PC, Lai YM, Chan CC, Hwang JS, Yang CY, Wang JD. Short-term effect of ozone on the pulmonary function of children in primary school. *Environ Health Perspect.* 1999;107:921-925
31. Korrick SA, Neas LM, Dockery DW, et al. Effects of ozone and other pollutants on the pulmonary function of adult hikers. *Environ Health Perspect.* 1998;106:93-99
32. Burnett RT, Smith-Doiron M, Stieb D, et al. Association between ozone and hospitalization for acute respiratory diseases in children less than 2 years of age. *Am J Epidemiol.* 2001;153:444-452
33. Stieb DM, Burnett RT, Beveridge RC, Brook JR. Association between ozone and asthma emergency department visits in Saint John, New Brunswick, Canada. *Environ Health Perspect.* 1996;104:1354-1360
34. Gent JF, Tiche EW, Holford TR, et al. Association of low-level ozone and fine particles with respiratory symptoms in children with asthma. *JAMA.* 2003;290:1859-1867
35. Kunzli N, Lurmann F, Segal M, Ngo L, Balmes J, Tager IB. Association between lifetime ambient ozone exposure and pulmonary function in college freshmen—results of a pilot study. *Environ Res.* 1997;72:8-23
36. Galizia A, Kinney PL. Long-term residence in areas of high ozone: associations with respiratory health in a nationwide sample of non-smoking young adults. *Environ Health Perspect.* 1999;107:675-679
37. Ghio AJ, Silbajoris R, Carson JL, Samet JM. Biologic effects of oil fly ash. *Environ Health Perspect.* 2002;110(suppl 1):89-94
38. Pandya RJ, Solomon G, Kinner A, Balmes JR. Diesel exhaust and asthma: hypotheses and molecular mechanisms of action. *Environ Health Perspect.* 2002;110(suppl 1):103-112
39. Dockery DW, Pope CA III. Acute respiratory effects of particulate air pollution. *Annu Rev Public Health.* 1994;15:107-132
40. Schwartz J. Air pollution and daily mortality: a review and meta analysis. *Environ Res.* 1994;64:36-52
41. Samet JM, Dominici F, Currier FC, Coursac I, Zeger SL. Fine particulate air pollution and mortality in 20 U.S. cities, 1987-1994. *N Engl J Med.* 2000;343:1742-1749
42. Schwartz J. Air pollution and blood markers of cardiovascular risk. *Environ Health Perspect.* 2001;109(suppl 3):405-409
43. California Air Resources Board. June 20, 2002 board meeting summary. Sacramento, CA: California Air Resources Board; 2002. Available at: www.arb.ca.gov/research/aaqs/std-rs/bdsum620/bdsum620.htm. Accessed August 8, 2003
44. Hoek G, Dockery DW, Pope A, Neas L, Roemer W, Brunekreef B. Association between PM10 and decrements in peak expiratory flow rates in children: reanalysis of data from five panel studies. *Eur Respir J.* 1998;11:1307-1311
45. Ostro B, Lipsett M, Mann J, Braxton-Owens H, White M. Air pollution and exacerbation of asthma in African-American children in Los Angeles. *Epidemiology.* 2001;12:200-208
46. Yu O, Sheppard L, Lumley T, Koenig JQ, Shapiro GG. Effects of ambient air pollution on symptoms of asthma in Seattle-area children enrolled in the CAMP study. *Environ Health Perspect.* 2000;108: 1209-1214
47. McConnell R, Berhane K, Gilliland F, et al. Air pollution and bronchitic symptoms in Southern California children with asthma. *Environ Health Perspect.* 1999;107:757-760
48. Woodruff TJ, Grillo J, Schoendorf KC. The relationship between selected causes of postneonatal infant mortality and particulate air pollution in the United States. *Environ Health Perspect.* 1997;105:608-612
49. Bobak M, Leon DA. The effect of air pollution on infant mortality appears specific for respiratory causes in the postneonatal period. *Epidemiology.* 1999;10:666-670
50. Ritz B, Yu F. The effect of ambient carbon monoxide on low birth weight among children born in southern California between 1989 and 1993. *Environ Health Perspect.* 1999;107:17-25
51. Bobak M. Outdoor air pollution, low birth weight, and prematurity. *Environ Health Perspect.* 2000;108:173-176
52. Dujmek J, Solansky I, Benes I, Lenicek J, Sram RJ. The impact of polycyclic aromatic hydrocarbons and fine particles on pregnancy outcome. *Environ Health Perspect.* 2000;108:1159-1164
53. Wang X, Ding H, Ryan L, Xu X. Association between air pollution and low birth weight: a community-based study. *Environ Health Perspect.* 1997;105:514-520
54. Ritz B, Yu F, Chapa G, Fruin S. Effect of air pollution on preterm birth among children born in Southern California between 1989 and 1993. *Epidemiology.* 2000;11:502-511
55. Ha EH, Hong YC, Lee BE, Woo BH, Schwartz J, Christiani DC. Is air pollution a risk factor for low birth weight in Seoul? *Epidemiology.* 2001;12:643-648
56. Xu X, Ding H, Wang X. Acute effects of total suspended particles and sulfur dioxides on preterm delivery: a community-based cohort study. *Arch Environ Health.* 1995;50:407-415
57. Schwartz J. Air pollution and hospital admissions for respiratory disease. *Epidemiology.* 1996;7:20-28
58. Ostro BD, Broadwin R, Lipsett MJ. Coarse and fine particles and daily mortality in the Coachella Valley, California: a follow-up study. *J Expo Anal Environ Epidemiol.* 2000;10:412-419
59. Laden F, Neas LM, Dockery DW, Schwartz J. Association of fine particulate matter from different sources with daily mortality in six US cities. *Environ Health Perspect.* 2000;108:941-947
60. Ozkaynak H, Thurston GD. Associations between 1980 U.S. mortality rates and alternative measures of airborne particle concentration. *Risk Anal.* 1987;7:449-461
61. Strand V, Svartengren M, Rak S, Barck C, Bylin G. Repeated exposure to an ambient level of NO₂ enhances asthmatic response to a nonsymptomatic allergen dose. *Eur Respir J.* 1998;12:6-12
62. Tunnicliffe WS, Burge PS, Ayres JG. Effect of domestic concentrations of nitrogen dioxide on airway responses to inhaled allergen in asthmatic patients. *Lancet.* 1994;344:1733-1736
63. Hajat S, Haines A, Goubet SA, Atkinson RW, Anderson HR. Association of air pollution with daily GP consultations for asthma and other lower respiratory conditions in London. *Thorax.* 1999;54:597-605
64. Shima M, Adachi M. Effect of outdoor and indoor nitrogen dioxide on respiratory symptoms in schoolchildren. *Int J Epidemiol.* 2000;29: 862-870
65. Lipsett M, Hurley S, Ostro B. Air pollution and emergency room visits for asthma in Santa Clara County, California. *Environ Health Perspect.* 1997;105:216-222
66. Zhu Y, Hinds WC, Kim S, Sioutas C. Concentration and size distribution of ultrafine particles near a major highway. *J Air Waste Manag Assoc.* 2002;52:1032-1042
67. Delfino RJ. Epidemiologic evidence for asthma and exposure to air toxics: linkages between occupational, indoor, and community air pollution research. *Environ Health Perspect.* 2002;110(suppl 4):573-589
68. Edwards J, Walters S, Griffiths RK. Hospital admissions for asthma in preschool children: relationship to major roads in Birmingham, United Kingdom. *Arch Environ Health.* 1994;49:223-227
69. van Vliet P, Knappe M, de Hartog J, Janssen N, Harssema H, Brunekreef B. Motor vehicle exhaust and chronic respiratory symptoms in children living near freeways. *Environ Res.* 1997;74:122-132
70. Brunekreef B, Janssen NA, de Hartog J, Harssema H, Knappe M, van Vliet P. Air pollution from truck traffic and lung function in children living near motorways. *Epidemiology.* 1997;8:298-303
71. Ciccone G, Forastiere F, Agabiti N, et al. Road traffic and adverse respiratory effects in children. SIDRIA Collaborative Group. *Occup Environ Med.* 1998;55:771-778
72. Feychting M, Svensson D, Ahlbom A. Exposure to motor vehicle exhaust and childhood cancer. *Scand J Work Environ Health.* 1998;24: 8-11

73. Pearson RL, Wachtel H, Ebi KL. Distance-weighted traffic density in proximity to a home is a risk factor for leukemia and other childhood cancers. *J Air Waste Manag Assoc*. 2000;50:175-180
74. Raaschou-Nielsen O, Hertel O, Thomsen BL, Olsen JH. Air pollution from traffic at the residence of children with cancer. *Am J Epidemiol*. 2001;153:433-443
75. Lipssett M, Campleman S. Occupational exposure to diesel exhaust and lung cancer: a meta-analysis. *Am J Public Health*. 1999;89:1009-1017
76. US Environmental Protection Agency. *Health Assessment Document for Diesel Engine Exhaust*. Washington, DC: Office of Research and Development NCEA; 2002. EPA/600/8-909/057F
77. International Agency for Research on Cancer. *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Diesel and Gasoline Engine Exhausts and Some Nitroarenes*. Vol 46. Lyon, France: International Agency for Research on Cancer; 1989:458
78. Diaz-Sanchez D, Garcia MP, Wang M, Jyrala M, Saxon A. Nasal challenge with diesel exhaust particles can induce sensitization to a neoallergen in the human mucosa. *J Allergy Clin Immunol*. 1999;104:1183-1188
79. Nel AE, Diaz-Sanchez D, Ng D, Hiura T, Saxon A. Enhancement of allergic inflammation by the interaction between diesel exhaust particles and the immune system. *J Allergy Clin Immunol*. 1998;102:539-554
80. Solomon GM, Campbell T, Feuer GR, Masters J, Samkian A, Paul KA. *No Breathing in the Aisles: Diesel Exhaust Inside School Buses*. New York, NY: Natural Resources Defense Council; 2001. Available at: www.nrdc.org/air/transportation/schoolbus/sbusinx.asp. Accessed August 8, 2003
81. Leikauf GD. Hazardous air pollutants and asthma. *Environ Health Perspect*. 2002;110(suppl 4):505-526
82. American Academy of Pediatrics, Goldman LR, Shannon MW, Committee on Environmental Health. Technical report: mercury in the environment: implications for pediatricians. *Pediatrics*. 2001;108:197-205
83. Suh HH, Bahadori T, Vallarino J, Spengler JD. Criteria air pollutants and toxic air pollutants. *Environ Health Perspect*. 2000;108(suppl 4):625-633
84. Woodruff TJ, Axelrad DA, Caldwell J, Morello-Frosch R, Rosenbaum A. Public health implications of 1990 air toxics concentrations across the United States. *Environ Health Perspect*. 1998;106:245-251
85. Nazemi MA. *Multiple Air Toxics Exposure Study (MATES-II) in the South Coast Air Basin*. Diamond Bar, CA: South Coast Air Quality Management District; 2000
86. Morello-Frosch RA, Woodruff TJ, Axelrad DA, Caldwell JC. Air toxics and health risks in California: the public health implications of outdoor concentrations. *Risk Anal*. 2000;20:273-291
87. Kyle AD, Wright CC, Caldwell JC, Buffler PA, Woodruff TJ. Evaluating the health significance of hazardous air pollutants using monitoring data. *Public Health Rep*. 2001;116:32-44
88. Heinrich J, Hoelscher B, Wichmann HE. Decline of ambient air pollution and respiratory symptoms in children. *Am J Respir Crit Care Med*. 2000;161:1930-1936
89. Frye C, Hoelscher B, Cyrus J, Wjst M, Wichmann HE, Heinrich J. Association of lung function with declining ambient air pollution. *Environ Health Perspect*. 2003;111:383-387
90. Friedman MS, Powell KE, Hutwagner L, Graham LM, Teague WG. Impact of changes in transportation and commuting behaviors during the 1996 Summer Olympic Games in Atlanta on air quality and childhood asthma. *JAMA*. 2001;285:897-905
91. Pope CA III. Respiratory hospital admissions associated with PM10 pollution in Utah, Salt Lake, and Cache Valleys. *Arch Environ Health*. 1991;46:90-97
92. Pope CA III. Particulate pollution and health: a review of the Utah valley experience. *J Expo Anal Environ Epidemiol*. 1996;6:23-34
93. Avol EL, Gauderman WJ, Tan SM, London SJ, Peters JM. Respiratory effects of relocating to areas of differing air pollution levels. *Am J Respir Crit Care Med*. 2001;164:2067-2072
94. Romieu I, Sierra-Monge JJ, Ramirez-Aguilar M, et al. Antioxidant supplementation and lung functions among children with asthma exposed to high levels of air pollutants. *Am J Respir Crit Care Med*. 2002;166:703-709
95. US Environmental Protection Agency. *The Plain English Guide To The Clean Air Act*. 1993. EPA-400-K-93-001. Available at: www.epa.gov/oar/oaqps/peg_caa/pegcaain.html. Accessed October 26, 2004
96. National Research Council. *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*. Washington, DC: National Academies Press; 2002. Available at: www.nap.edu/books/0309076013/html. Accessed August 8, 2003
97. Hwang R, Millis B, Spencer T. *Clean Getaway: Toward Safe and Efficient Vehicles*. New York, NY: Natural Resources Defense Council, 2001. Available at: www.nrdc.org/air/transportation/cape/cafexn.asp. Accessed August 8, 2003
98. Jackson RJ, Kochtitzky C. *Creating a Health Environment: The Impact of the Built Environment on Public Health*. Washington, DC: Sprawl Watch Clearinghouse. Available at: www.sprawlwatch.org/health.pdf. Accessed August 8, 2003
99. US Environmental Protection Agency, Office of Air and Radiation. *Air Quality Index: A Guide to Air Quality and Your Health*. Research Triangle Park, NC: Environmental Protection Agency; 2000. Publication No. EPA-454/R-00-005. Available at: www.epa.gov/airnow/aqibroch. Accessed August 8, 2003
100. American Academy of Pediatrics, Committee on Environmental Health. Outdoor air pollutants. In: Etzel RA, Balk SJ, eds. *Pediatric Environmental Health*. 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003;69-86

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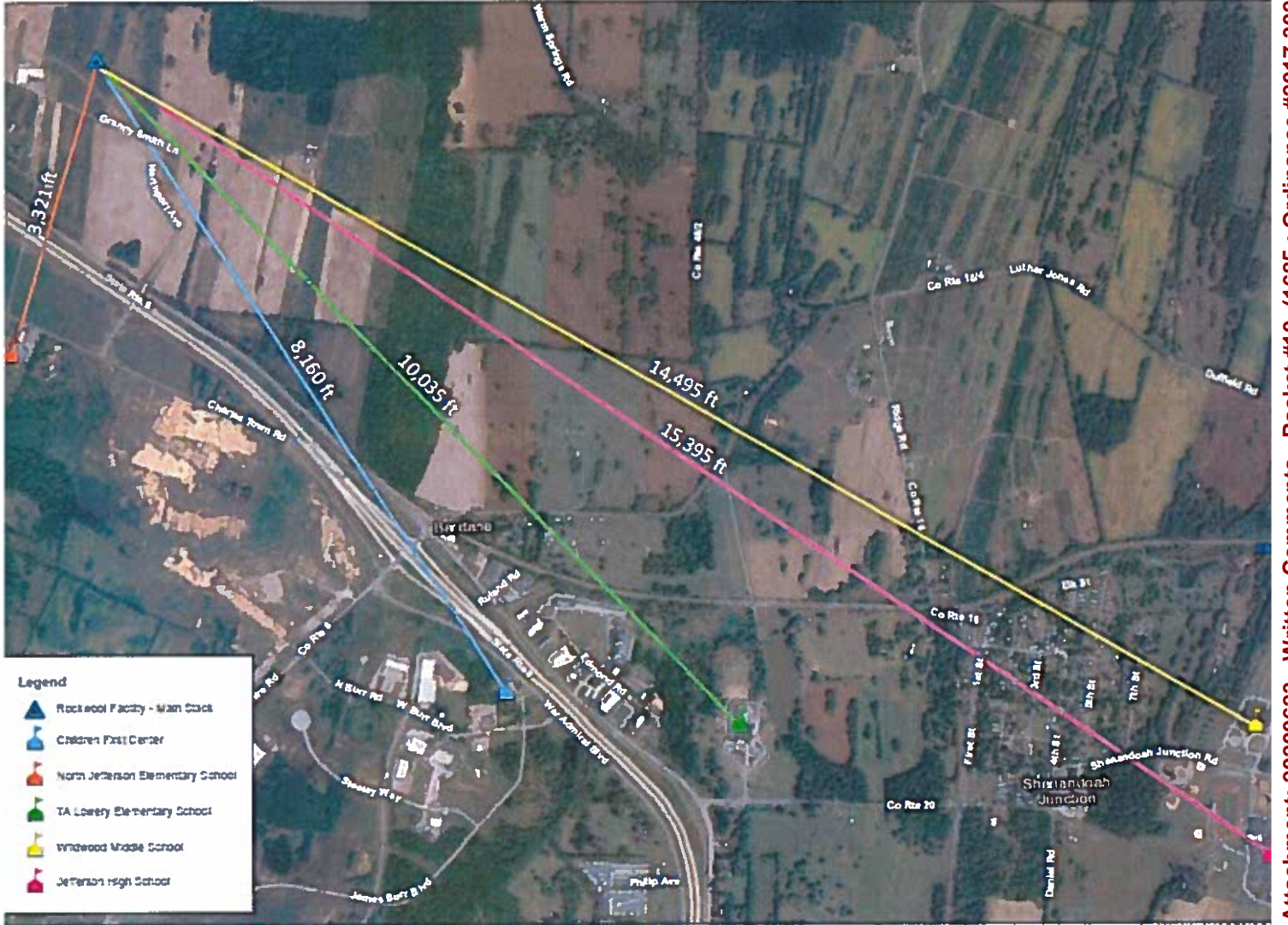
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CTEH Kearneysville Area Schools
Health Hazard Risk Assessment - Kearneysville, WV



Project: 1
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City: Kearns
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Rockwool's entrance into Jefferson County, West Virginia, has been accompanied by opposition by many and support by a few. But more than anything, it has brought up questions.

- Questions about the future of a rural community on the outskirts of Washington
- Questions about how politics plays into poverty.
- Questions about negotiating health over industry, or vice versa.

These are questions that are hard to answer.

Thankfully, there are certain facts that cannot be questioned.

The location of the Rockwool plant in Ranson is across the street from North Jefferson Elementary School. It is within 2 miles of 4 public schools housing 30% of Jefferson County's student population as well as several daycare centers.

- The placement of the plant to within 2 miles of 4 public schools goes against the recommendations of the Environmental Protection Agency and The World Health Organization, who both state that schools should not be located near heavy industry. The WHO specifically states that schools should not be within 2 miles of heavy industry. (www.who.int/school_youth_health/media/en/physical_sch_environment_v2.pdf?ua=1)

The facility has been approved for heavy toxic emissions, with smokestacks 21 stories high. In Rockwool's air quality application, it states that there will be large amounts of particulate matter per year (154 tons of PM10 and 134 tons of PM2.5).

- The American Heart Association concluded that exposure to particulate matter air pollution contributes to cardiovascular morbidity and mortality and long term exposure reduces life expectancy. (<https://www.ncbi.nlm.nih.gov/m/pubmed/20458016>)
- Ongoing research in the US, Canada, Italy and China has linked elevated PM2.5 exposure during pregnancy to premature delivery and low birth weight. The association has been replicated in multiple studies.

This plant will make Rockwool the #2 biggest polluter in the entire state of West Virginia.

- And yet, Rockwool's Clean Air Permit was given without a hearing in the community in which the plant would be built. No evaluation of the impact of the toxic emissions on the nearby schools has been conducted.

Unfortunately, this leads to more questions:

- How did Rockwool get approval to build this plant across the street from an elementary school when there is scientific evidence of the harm caused by toxic emissions and particulate matter air pollution?
- How does the addition of 150 jobs compare to the detrimental effect this plant will have on already established businesses and livelihoods based in agriculture and tourism?
- How is land that was zoned to be for mixed use residential become rezoned for industrial?

- How did this plant make it through the application review process without questions of public welfare and safety being addressed?

As pediatricians in Jefferson County, West Virginia, we see how poverty affects our patients on a daily basis. Some of our patients miss appointments because they do not have transportation. Other patients fail to gain weight or develop properly due to food scarcity. Many do not go outside due to not having access to safe neighborhoods or play spaces. And many of their parents have little time for anything else besides work and sleep-and most definitely do not have the energy to read notices in the local newspaper, speak to officials or hold their politicians accountable.

Once the Rockwool plant is open, we wonder if our patients will go outside less frequently due to concerns about air quality. Will they have access to clean local water? Will we be treating more asthma exacerbations? More cystic fibrosis exacerbations? Who will speak for these children? Do we need to witness the harm done to them before we act?

The good news is that the Rockwool plant is not a done deal. There are ways to stop Rockwool from opening the Ranson plant. Rockwool still needs approvals of the water bond, the sewer bond and the building permit to proceed. There is a grassroots citizen group that is actively opposing the Rockwool plant and has undertaken a legal fight.

We can speak for the children of the Jefferson County starting right now.

For more information, please go to <https://www.toxicrockwool.com> or join the Facebook group Concerned Citizens Against Rockwool.

Sincerely,

Christine Whitman, MD
Pediatrician
Member of the West Virginia Chapter, American Academy of Pediatrics

Eleanor Smith, MD
Pediatrician
Member of the West Virginia Chapter, American Academy of Pediatrics

Dear Ms Christina Mabe-Stork

I am Jerome A. Paulson, MD, FAAP. I am the pediatric consultant to the Mid-Atlantic Center for Children's Health & the Environment, also known as MACCHE. MACCHE is the Pediatric Environmental Health Specialty Unit (PEHSU) that serves, West Virginia, Pennsylvania, Delaware, Maryland, Virginia and the District of Columbia. Your inquiry has been referred to us by Dr Susan Buchanan of the PEHSU serving the Great Lakes area, the Great Lakes Center for Children's Environmental Health.

I understand that you are concerned about the development of an industrial facility near the local elementary school that will use coal as the source of power. You have told us that the plant is expected to use 84-90 tons of coal per day and release 152,935 tons carbon dioxide equivalent per year, 238.96 tons nitrogen oxide per year, 147.45 tons sulfur dioxide per year, 67.7 tons of formaldehyde per year, several hundred tons of atmospheric particulate matter per year, as well as various volatile organic compounds. You also indicated that the plant will employ two, 213 foot tall smoke stacks.

While the information that you have provided is not sufficient to perform a full environmental impact assessment, I agree that there is reason for concern.

Some of the local impact will be decreased by the tall smokestacks. While not preventing the production of the pollutants they will disperse some of them far downwind from the local community and compromise the health of the populations downwind.

One of my colleagues at MACCHE has developed some maps of your local area. The first map indicates that there are several elementary, middle and high schools within 5 miles of the Rockwool factory site. In addition, there are many churches and child care centers within 5 miles of the factory. The second map adds in potential farm land. We do not have information about what that land is actually used for; but we would be concerned about contamination of the land itself or contamination of crops grown for human or animal consumption.

I certainly agree that the increase in the pollutants in the local atmosphere will present health threats not only to the children in the elementary school, but to the community as a whole. That said, it is important to recognize that given the physiologic, anatomic and behavioral differences between children and adults, children are often at greater risk of adverse health impacts of pollutants than are adults. Some of the concerns that I have are as follows. This is not ment a complete list of toxic chemicals that may be released by the factory.

1. Overall air pollution. It is well documented that children growing up in areas with greater amounts of air pollution are likely to show decreased lung function as young adults relative to children growing up in areas of less air pollution. There is increasing evidence that air pollution is neurotoxic to children in utero and to young children.

2. Particulate air pollution. Particulate pollution can certainly exacerbate asthma in both children and adults. In adults, exposure to particulate pollution is associated with increased risk of heart attack and stroke. There is increasing evidence that particulate air pollution is neurotoxic to children in utero and to young children.
3. Oxides of nitrogen and sulfur. Both oxides of nitrogen and oxides of sulfur form acids in the presence of moisture in the air. These acids can irritate the eyes and nose. More importantly, when inhaled, these acids irritate the lining of the bronchi and precipitate asthma attacks. There is increasing evidence that oxides of nitrogen are neurotoxic to children in utero and to young children.
4. Mercury. The burning of coal releases mercury. Because mercury is relatively heavy, it precipitates out of the atmosphere relatively close to the source. If there are rivers and lakes near by, that mercury is converted to methyl mercury and is incorporated into the tissue of fish. If those fish are caught and eaten the mercury is toxic to the brain. This is particularly worrisome for the children in utero of women who are pregnant and young children.
5. Formaldehyde. Formaldehyde rapidly disperses and breaks down in the air. If there are high formaldehyde levels within the factory, the primary risk is to the workers. Formaldehyde can increase the risk of asthma, and, most importantly, is a known human carcinogen. Again, the risk of cancer would primarily be observed in workers exposed to high levels of formaldehyde.
6. Carbon dioxide. While the carbon dioxide may not present an immediate health risk to local children or adults, it certainly contributes to worsening of climate change on a global scale. We are seeing increased severe weather events as a result of climate change. Climate change is causing changes in infectious disease patterns. It has increased the length and severity of the allergy season, as well as increasing other health risks.
7. Ozone. The factory will release ozone and chemicals which promote the formation of ozone in the atmosphere. Ozone is hazardous to all people; and presents special risks to people with asthma or other lung diseases, older adults, people of all ages who exercise or work hard outside, and babies and children. Ozone irritates the mucous membranes of all people and can cause asthma attacks in those who are predisposed.
8. Phenol. Phenol is another chemical that can irritate the mucous membranes and the lungs. In animals, long term, repeated exposures to phenol in the air can cause more serious health problems including neurologic, cardiac pulmonary and liver damage.

I agree with you that it is not prudent to build this plant so close to an elementary school. You may use this letter as you see fit in your efforts to raise concerns. While there is not a West Virginia Chapter of Moms Clean Air Force (<https://www.momscleanairforce.org/>), the national organization may be helpful; and you may want to consider starting a West Virginia Chapter. Also, I would suggest contacting the West Virginia chapter of the American Lung Association (<https://www.lung.org/about-us/local-associations/west-virginia.html>). I know that the Sierra Club of West Virginia (<https://www.sierraclub.org/west-virginia>) has raised

concerns about the Rockwood plant as has the West Virginia Chapter of the American Academy of Pediatrics (<https://www.wvaap.com/>).

Please let me know if there is any additional information that I can provide.

Sincerely,

Jerome A. Paulson, MD, FAAP
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Low-Level Temperature Inversions and Their Effect on Aerosol Condensation Nuclei Concentrations under Different Large-Scale Synoptic Circulations

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ABSTRACT

Knowledge of the statistical characteristics of inversions and their effects on aerosols under different large-scale synoptic circulations is important for studying and modeling the diffusion of pollutants in the boundary layer. Based on results generated using the self-organizing map (SOM) weather classification method, this study compares the statistical characteristics of surface-based inversions (SBIs) and elevated inversions (EIs), and quantitatively evaluates the effect of SBIs on aerosol condensation nuclei (CN) concentrations and the relationship between temperature gradients and aerosols for six prevailing synoptic patterns over the the Southern Great Plains (SGP) site during 2001–10. Large-scale synoptic patterns strongly influence the statistical characteristics of inversions and the accumulation of aerosols in the low-level atmosphere. The activity, frequency, intensity, and vertical distribution of inversions are significantly different among these synoptic patterns. The vertical distribution of inversions varies diurnally and is significantly different among the different synoptic patterns. Anticyclonic patterns affect the accumulation of aerosols near the ground more strongly than cyclonic patterns. Mean aerosol CN concentrations increase during SBIs compared to no inversion cases by 16.1%, 22.6%, 24.5%, 58.7%, 29.8% and 23.7% for the six synoptic patterns. This study confirms that there is a positive correlation between temperature gradients and aerosol CN concentrations near the ground at night under similar large-scale synoptic patterns. The relationship is different for different synoptic patterns and can be described by linear functions. These findings suggest that large-scale synoptic patterns change the static stability of the atmosphere and inversions in the lower atmosphere, thereby influencing the diffusion of aerosols near the ground.

Key words: temperature inversion, aerosol, condensation nuclei, large-scale synoptic pattern, statistical characteristics

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1. Introduction

Low-level atmospheric temperature inversions, where atmospheric temperature increases with altitude, occur frequently at middle and high latitudes. They influence the depth of vertical mixing, the surface radiation balance, the diffusion of pollutants, and cloud formation in the boundary layer (Fedorovich et al., 1996; Wendisch et al., 1996; Dong et al., 2005; Janhall et al., 2006; Wallace et al., 2010). An inversion in the lower atmosphere creates stable atmospheric conditions, which restricts the diffusion of industrial and human-produced smoke, and harmful gases and aerosols. These

pollutants accumulate near the ground, and usually lead to air pollution episodes. Over the past century, several air pollution episodes of major significance have occurred around the world and have led to thousands of deaths. Temperature inversions were mainly responsible for these events (Watanabe, 1998).

Investigation of the effects of low-level temperature inversions on pollutants not only helps us understand the impact of inversions on environmental changes, but also provides a reliable basis for effectively predicting pollution episodes and controlling pollutant emissions. Pollutant gases near the ground, such as CO, NO, NO₂, SO₂ and O₃, significantly increase if a temperature inversion, especially a morning time surface-based temperature inversion (SBI), is present (Holzworth, 1972; Janhall et al., 2006). Aerosols, an important

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kind of air pollutant, affect human health, and fine particulate matter (PM_{2.5}) mass loadings have been statistically correlated with morbidity and mortality (Pope et al., 1993). The increase in aerosol particle concentrations near the ground is also highly correlated with the presence of temperature inversions (Malek et al., 2006). Wallace et al. (2010) studied the effect of temperature inversions on ground-level NO₂ and aerosols, and reported increases of 49% and 54% in NO₂ and PM_{2.5}, respectively, during nighttime inversion episodes. However, which temperature inversion parameters affect the accumulation of aerosols, and the relationship between these parameters and aerosols is still uncertain. Milionis and Davies (1992) found that the intensity of inversions is directly proportional to their ability to inhibit the vertical movement of pollutants. This information is important for modeling the diffusion and transport of air pollutants. Most models of air pollutant diffusion already incorporate characteristics of the capping inversion at the top of the atmospheric boundary layer (ABL) (Milionis and Davies, 2008). However, little attention has been paid to the quantitative assessment of the relationship between inversion parameters and aerosol concentrations.

Serious pollution episodes do not generally result from sudden increases in the emission of pollutants, but rather from certain meteorological conditions that diminish the ability of the atmosphere to disperse pollutants (Cheng et al., 2007). There is a causal relationship between prevailing weather conditions and the statistics describing atmospheric temperature inversions (Milionis and Davies, 2008). Local surface conditions can counteract atmospheric dynamics in regulating inversion activity and air quality. Bailey et al. (2011) analyzed temperature inversion characteristics in the U.S. Southwest and relationships to 500 hPa large-scale atmospheric circulation, and found that dynamical changes with climate did not uniformly influence inversions and urban air quality conditions in that region. Pearce et al. (2011) identified 20 large-scale synoptic patterns over Australia by applying the self-organizing map (SOM) method to daily mean sea level pressure reanalysis data. They found links between synoptic-scale sea level circulation and observed changes in air pollutant concentrations, and that individual synoptic categories had different effects on air pollutants. These studies indicate that changes in large-scale weather patterns can affect low-level temperature inversion statistics and air quality, and that the presence of temperature inversions also prevents pollutants from dispersing. Yet it remains unclear whether the effect of temperature inversion on pollutants is significantly different for different synoptic patterns. The SGP (Southern Great Plains) Central Facility (CF) is located near Lamont in north central Oklahoma and is home to a suite of specialized *in situ* and remote sensing instruments gathering atmospheric data of unprecedented quality, consistency, and completeness. All aerosol and radiosonde data used in this work are from this site. The SGP CF is surrounded by farmland and is distant from large urban areas. However, there are several small cities, one power plant, one oil refinery,

and an interstate highway within 50 km of the site. So, atmospheric aerosols over the site can be considered representative of a mixed regional aerosol type. The daily aerosol condensation nuclei (CN) concentrations cycle is strong at the SGP CF. The average aerosol CN concentration near the ground is low and constant during the night, quickly increases during the two hours after sunrise, and reaches its peak in the midafternoon. Possible explanations for the high daytime aerosol CN concentration levels include sulfate formation from SO₂ emissions from local power plants or oil refineries, the photochemically-driven production of organic or N-containing particles, regional-scale agricultural burning or transportation activities, and/or diurnal convective mixing and stability cycles (Sheridan et al., 2001).

The purpose of this work is to quantify inversion activity and its effect on aerosols, and to deduce the relationship between inversion parameters and aerosol CN concentrations for a set of prevailing synoptic patterns over the continental United States. Section 2 briefly describes the data and the method used in this study. The main results are presented in section 3. Conclusions are given in section 4.

2. Data and methods

2.1. Data

Ten years (2001–10) of continuous and high-quality routine radiosonde data measured at the SGP CF are used in this study. These measurements are carried out under the aegis of the U.S. Department of Energy's Atmospheric Radiation Measurement Program (www.arm.gov). A Vaisala sounding unit is used to detect vertical profiles of pressure, temperature, relative humidity, and wind speed and direction, four times a day at 0530, 1130, 2030 and 2330 UTC. The profiling vertical resolution is ~10 m (Holdridge et al., 2011). For the purpose of calculating nighttime and daytime temperature inversion parameters, profiles generated from the 2330 UTC sounding represent daytime profiles and 0530/1130 UTC soundings represent nighttime profiles.

Simultaneous ground measurements of aerosol CN and total number concentrations for particles with diameters ranging from 10 nm to 3 μm made at a one-minute time resolution are also used (Jefferson, 2011).

For characterizing large-scale synoptic patterns, the daily National Centers for Environmental Protection (NCEP) mean sea level pressure (MSLP) records from the North American Regional Reanalysis (NARR) are used. The MSLP field is a commonly used proxy for atmospheric circulation because it relates well to the spatial pattern of large-scale synoptic processes (Huth et al., 2008). Corresponding daily 500 hPa geopotential heights are also used in the comprehensive analysis presented in this study. The resolution of NCEP NARR products is 32 km × 32 km and the domain extends from 30°N to 50°N, and from 75°W to 120°W (<http://www.esrl.noaa.gov>).

2.2. Algorithm for detecting inversions and the SOM method for weather classification

This study focuses on low-level inversions with bases below 2000 m. SBIs are inversions with bases below 100 m and elevated inversions (EIs) are inversions with bases above 100 m. The first-derivative algorithm is used here for detecting inversions (Kahl, 1990; Serreze et al., 1992). The derivative of each temperature profile is first calculated. Then, the profile of these derivatives is scanned upward from the surface to the 2000 m level. An inversion layer is identified when the derivative is positive and remains positive over an altitude range of at least 100 m. Very thin negative derivative layers are occasionally encountered. If these layers are less than 100 m, then the thin layers are considered as embedded within the overall inversion layer.

The SOM is an artificial neural network algorithm used for clustering, visualization, and abstraction (Kohonen, 1998). It offers an alternative approach to synoptic climatology by providing a mechanism for visualizing the complex distribution of synoptic states while treating the data as a continuum (Hewitson and Crane, 2002). This technique has been increasingly used to successfully study relationships between local meteorological conditions and the large-scale climatology. The SOM algorithm identifies groups in such a way that minimizes the within-group differences while maximizing the between-group differences. An advantage of this method is that nodes are distributed in a nonlinear fashion. As a result, a larger number of climatological groupings are created near areas of high-density data, allowing one to represent the variability in the original time series of geopotential height records more robustly (Bailey et al., 2011). The use of a small dimension will result in a map that provides a broad generalization of the input data, while a large dimension will result in a map with types that may be quite similar to adjacent types (Cassano et al., 2006). The output dimension selected in this study is based on previous work done on North American weather classification (Hewitson and Crane, 2002; Bailey et al., 2011). Ten years of daily MSLP maps were organized into a 5×5 output dimension through application of the SOM algorithm. The atmospheric state is partitioned into 25 categories associated with large-scale synoptic patterns to provide insight into the influence of large-scale synoptic processes on temperature inversions and aerosols.

The SOM of the MSLP provides a clear visualization of the atmospheric continuum affecting the SGP CF by presenting 25 archetypes of the synoptic state that characterize large-scale atmospheric circulation over the region. The most frequent and representative synoptic patterns are the cyclonic center (CC, also denoted as 00, 7.6%), the weak pressure (WP, also denoted as 02, 6.3%), the cyclonic bottom (CB, also denoted as 04, 4.7%), the cold front (CF, also denoted as 32, 4.7%), the anticyclone edge (AE, also denoted as 34, 5.5%), and the anticyclone center (AC, also denoted as 43, 6.3%). These prevailing synoptic patterns form the basis of the following analysis in this work. Figure 1 shows annual

MLSP patterns and their corresponding 500 hPa geopotential height patterns for the six synoptic patterns averaged over 2001 to 2010. In the CC scenario, the SGP CF is located within the area of lowest atmospheric surface pressure (Fig. 1a). A southwesterly flow at the 500 hPa level is seen and is associated with strong convergence and ascending motion in the lowest part of the atmosphere. Weather conditions are mainly overcast with frequent rainfall. In the WP scenario, the SGP CF is within an area of weak depression at the surface and under a 500 hPa ridge (Fig. 1b). Cloudy skies dominate. The SGP CF is located along the edge of a strong depression and near a strong anticyclone in the CB scenario (Fig. 1c). Conditions at the 500 hPa level are similar to those seen in the CC scenario and cloudy skies prevail. Figure 1d shows the CF scenario where the SGP CF is located in the transition zone between warm and cold air masses. Weather conditions are generally rainy and windy with clearing after passage of the front. In the AE scenario, the SGP CF is situated at the rear of a strong anticyclone and the dominant airflow at the 500 hPa level is from the west (Fig. 1e). The sky is clear or contains scattered clouds. The SGP CF is located in the center of anticyclone subsidence in the AC scenario (Fig. 1f). There is a northwesterly flow at the 500 hPa level associated with strong divergence in the lower atmosphere. Clear skies dominate.

3. Results

3.1. Inversion characteristics

In order to quantitatively express the relationship between inversion activity and prevailing patterns, a temperature inversion activity index (TIAI) is defined as the product of “mean intensity of inversions (the difference in the potential temperature across the inversion) and average number of inversions per profile where at least one inversion is identified and proportion of temperature profiles with at least one inversion is identified”, i.e.,

$$\text{TIAI} = \frac{\sum_{i=1}^K d\theta_i}{K} \frac{K}{n} \frac{n}{N} = \frac{\sum_{i=1}^K d\theta_i}{N},$$

where $d\theta$ denotes the difference in the potential temperature across the inversion, K is the corresponding total number of inversions, i represents one of the corresponding inversions, N is the total number of available vertical temperature inversions, and n is the corresponding number of profiles with at least one inversion (Milionis and Davies, 2008).

According to the synoptic atmospheric classification, the frequencies of the SBI, EI and no-inversion (NIN), and the parameters of the temperature inversions, are calculated for each synoptic pattern using the corresponding temperature profiles. For some profiles, two, three, or four inversions are detected; the SBI and EI occurred together, and all SBI and EI values are considered in this study.

A one-way analysis of variance (ANOVA) is performed to examine whether the mean values of inversion parameters are

statistically significantly different among the six prevailing patterns defined above. Fisher's least significant difference (LSD) test (Fisher, 1966) is also applied, and all differences of pairs of class means are compared with LSDs. A significance level of 0.05 is used. In this work, our null hypothesis (H_0) is that there is no difference in the mean inversion parameters or aerosol concentrations among the six prevailing patterns (groups). H_0 is tested using the F -statistic. When H_0 is rejected, one-way ANOVA can only determine that mean inversion parameters or aerosol concentrations among groups are significantly different, but it does not necessarily confirm that every set of two groups is sufficiently different. The LSD

test is a type of multiple comparison test that can investigate this difference between groups. For the application of this test, all differences of two groups are compared using the LSD. When the difference between two group means is greater than the LSD, the two groups are significantly different at the α significance level (0.05).

Table 1 shows the frequencies of occurrence of SBIs and no inversions (NOIs) and the TIAI index of SBIs for the six synoptic patterns. SBIs occur more frequently under anticyclonic patterns (AE: 46.0%; AC: 38.3%) and less frequently under cyclonic patterns (CB: 26.6%; CC: 31.6%) and when a cold front is present (CF: 22.8%). For cyclonic patterns and

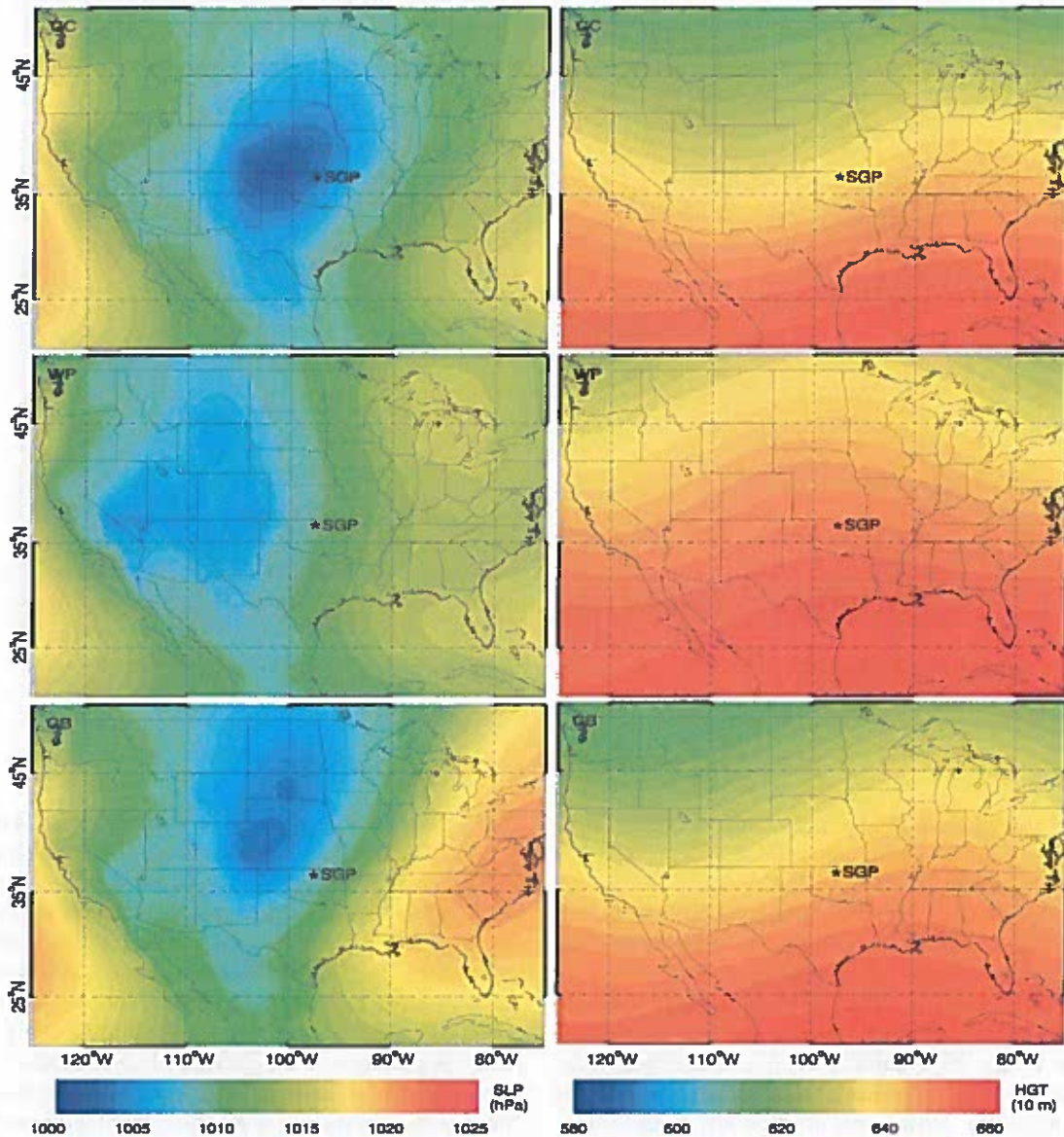


Fig. 1. Annual mean sea level pressure (MSLP) patterns (left column) and their corresponding geopotential height (HGT) patterns (right column) at the 500 hPa pressure level for the six synoptic patterns averaged over 2001 to 2010. CC, WP, CB, CF, AE and AC in the figure stand for patterns of cyclonic center, weak pressure pattern, cyclonic bottom, cold front, anticyclone edge, and anticyclone center, respectively.

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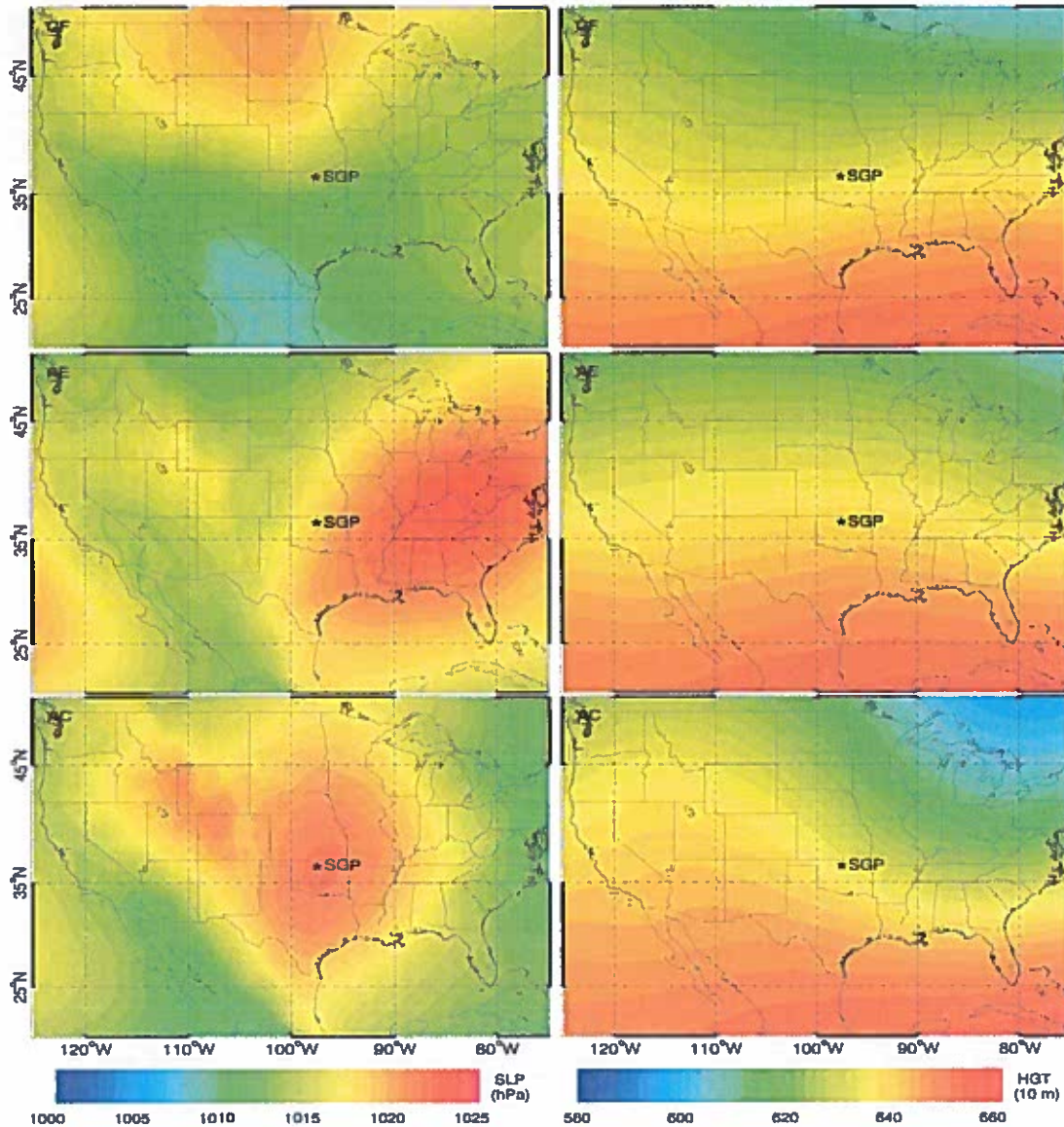


Fig. 1. (Continued.)

weak pressure, the frequency of occurrence of NOIs is high (more than 30%) and that of anticyclonic patterns and cold front is low (less than 20%). Mean TIAI index values of SBIs for the AE and AC patterns are almost twice those for the CB and CF patterns. Table 2 shows mean variances of the SBIs and results from the one-way ANOVA and the LSD test for the six synoptic patterns. Differences in the mean values of temperature difference and temperature gradient across the inversions for the six synoptic patterns are statistically significant at the 95% confidence level (F -values are 17.5 and 32.3, respectively). Differences in mean SBI depths among the different synoptic patterns are small, except for the AC pattern (shaded in gray), which is significantly thinner than the other five patterns. The anticyclonic patterns have the highest values of mean temperature difference across inversions and temperature gradients (shaded in black) and the

lowest values are seen for the WP pattern (shaded in gray). In general, anticyclonic patterns favor the formation of SBIs. This pronounced difference may have arisen because anticyclonic patterns are associated with divergence and subsidence near the surface, which increases static stability in the lower atmosphere. The 500 hPa airflow over the SGP CF was from the northwest, bringing in cold and dry air. Under these conditions, clear skies dominated, leading to strong infrared radiation cooling near the ground, which is conducive to the formation and evolution of SBIs. Cyclonic patterns are associated with convergence and ascent near the ground, which decreases static stability in the lower atmosphere. The moist southwesterly air flow at the 500 hPa level leads to cloudy skies with frequent rainfall over the SGP CF. This is generally not conducive to the formation of SBIs. During and after the passage of a cold front at the SGP CF, inclement weather

Table 1. Frequencies of occurrence of SBIs and NOIs and mean TIAI indices of SBIs for the different synoptic patterns.

Synoptic patterns	SBI Frequency (%)	NOI Frequency (%)	SBI TIAI
Cyclonic Center (00)	31.6	35.0	2.49
Weak Pressure (02)	36.2	37.6	2.50
Cyclonic Bottom (04)	26.6	32.2	2.02
Cold Front (32)	22.8	18.6	1.87
Anticyclone Edge (34)	46.0	19.4	4.19
Anticyclone Center (43)	38.3	11.7	3.19

Table 2. Mean depth, temperature difference across the inversion, and temperature gradient for SBIs. Values of SBI characteristics below (above) normal are marked by # (##). The significance level of the *F*-test is 5%.

Synoptic pattern	Depth (m)		$\Delta T(^{\circ}C)$		Temperature gradient [$^{\circ}C (100 m)^{-1}$]	
	Mean	Std	Mean	Std	Mean	Std
CC (00)	266.0	152	5.20	3.6	2.14	1.3
WP (02)	260.9	133	4.31 [#]	2.1	1.99	1.4
CB (04)	275.4	174	4.84	3.4	2.12	2.0
CF (32)	268.6	165	5.47	2.8	2.51	1.6
AE (34)	263.0	169	6.45 ^{##}	3.1	3.07 ^{##}	1.9
AC (43)	216.3 [#]	171	6.17 ^{##}	2.7	3.60 ^{##}	2.1
<i>F</i> -statistics	3.9		17.5		32.3	

Table 3. As in Table 1, but for EIs.

Synoptic pattern	Frequency (%)	Inversions per profile	TIAI
Cyclonic Center (00)	44.2	0.49	2.11
Weak Pressure (02)	35.6	0.37	1.38
Cyclone Bottom (04)	53.5	0.59	2.64
Cold Front (32)	66.9	0.91	5.46
Anticyclone Edge (34)	58.0	0.66	2.63
Anticyclone Center (43)	74.9	1.09	4.61

Table 4. As in Table 2, but for EIs.

Synoptic patterns	Depth (m)		$\Delta T(^{\circ}C)$		Temperature gradient [$^{\circ}C (100 m)^{-1}$]	
	Mean	Std	Mean	Std	Mean	Std
CC (00)	211.6 [#]	131	2.71	2.0	1.52	1.2
WP (02)	174.8 [#]	108	2.49 [#]	2.2	1.62	1.0
CB (04)	223.1	124	2.88	1.8	1.45	0.8
CF (32)	251.6	167	3.63 ^{##}	3.1	1.52	0.9
AE (34)	235.0	134	3.22	2.4	1.53	1.1
AC (43)	256.6	155	2.97	2.1	1.30 [#]	0.8
<i>F</i> -statistics	12.9		8.6		5.0	

develops. SBIs rarely occur under these weather conditions. However, before the passage of a cold front, the site is located within a warmer air mass, and winds are calm. The

lower atmosphere is statically stable and SBIs can develop. The intensity of SBIs before a cold frontal passage is somewhat weaker than that under the anticyclonic pattern.

Tables 3 and 4 show the same information as Tables 1 and 2, but for EIs. EIs and SBIs have significantly different characteristics, especially with regard to mean temperature differences and temperature gradients across inversions. The frequency of occurrence of profiles with at least one inversion, the average number of inversions per profile, the mean depth, and the mean temperature difference across inversions are highest in magnitude for anticyclonic and CF patterns (shaded in black), and are lowest in magnitude for the AC and WP patterns. Intermediate values are seen for the CB pattern (shaded in gray). TIAI index values for EIs range from 1.38 to 5.46 for the WP and CF patterns, respectively. The difference in temperature gradients of EIs among all patterns is small (*F*-value = 5.0), and the mean temperature gradient under the AC pattern is significantly lower than that under the other five synoptic conditions. The inversion strength and activity of EIs are comparatively higher for anticyclonic patterns because these patterns are associated with air subsiding in the lower troposphere and gradually spreading over a wide area. Warming by adiabatic compression occurs and inversions are then formed. SBIs are destroyed by turbulence near the surface after sunrise, which leads to EIs separated from the ground. The strength and activity of EIs under the CF pattern is the highest because cold front systems are associated with polar air masses moving into lower latitudes. A polar air mass is colder than the air aloft, so creates stronger EIs. Convergence and upward motion in the lower troposphere associated with cyclonic conditions decreases static stability, which is not conducive to the formation of EIs.

The vertical distribution of inversion characteristics according to the synoptic pattern was examined. High vertical resolution radiosonde profiles used in this work can provide detailed information about the vertical distribution of inversions in the lower atmosphere. Figure 2 shows the vertical distribution of daytime and nighttime frequencies of occurrence of inversions from the surface to 2 km for the six synoptic patterns. The distributions of nighttime inversion frequency for all synoptic patterns have a pronounced maximum from the ground to 100 m (Fig. 2a). The rate of decrease with height is relatively higher above 100 m and inversion frequencies for all synoptic patterns are less than 5% beyond 1300 m. For AC and WP patterns, the frequency of inversions is greater than 70% and the rate of decrease with height is also significantly higher below 500 m when compared to cyclonic and CF patterns. The vertical distributions of daytime inversion frequency for the six synoptic patterns are quite different from the nighttime cases (Fig. 2b). There are almost no SBIs near the ground and inversion frequencies rapidly increase with height, reaching maximum values from 300 to 700 m. Inversion frequencies for the anticyclonic pattern peak between 300 m and 500 m. No clear maximum in inversion frequency below 2 km is seen for the CC and WP patterns. For the CF and CB patterns, inversion frequencies are higher and reach a maximum between 500 m and

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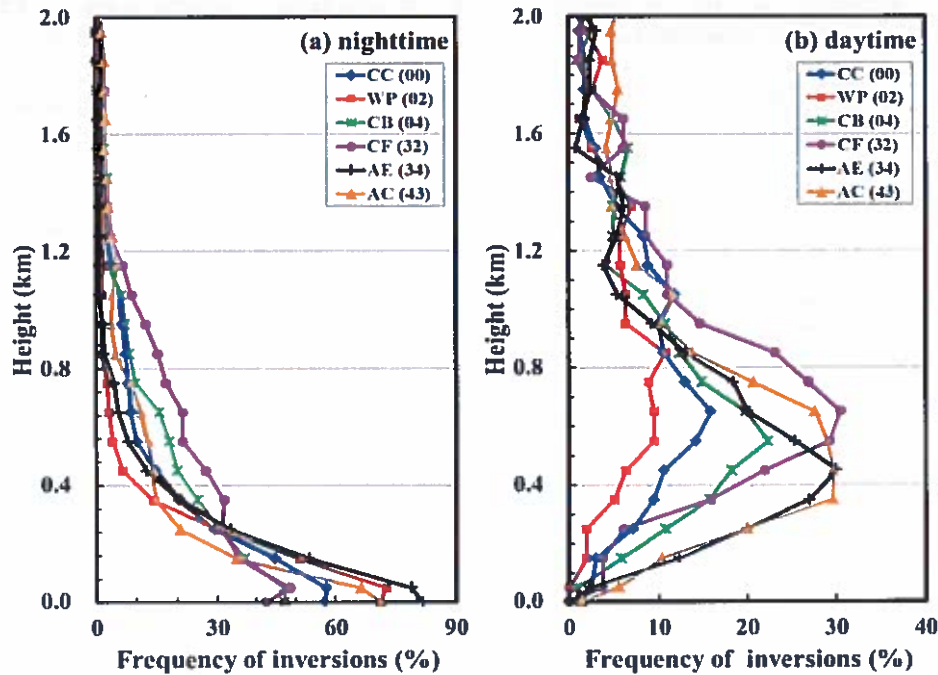


Fig. 2. Vertical distributions of (a) nighttime and (b) daytime frequencies of occurrence of inversions below 2 km for the six synoptic patterns.

700 m. The effect of synoptic patterns on the vertical distribution of inversions is summarized as follows. Anticyclonic and WP patterns are associated with a stable low-level atmosphere and clear skies, which is conducive to the formation of shallow and strong radiation inversions at night. Subsidence in the lower atmosphere is stronger for anticyclonic patterns, which leads to favorable conditions for the formation of EIs at night and during the day. Cyclonic patterns are associated with an unstable lower atmosphere and cloudy skies, which is not conducive to the formation of SBIs and EIs during both daytime and nighttime. CF and CB patterns are associated with cold air invasions, which are favorable conditions for the development of EIs, but not of SBIs.

Overall, large-scale synoptic patterns strongly affect the activity, intensity, and vertical distribution of both SBIs and EIs. There is a significant difference in the vertical distribution of daytime and nighttime inversions. Anticyclonic patterns are associated with maxima in activity and intensity, and cyclonic patterns are associated with minima in activity and intensity for both SBIs and EIs. The CF pattern is conducive to the development of EIs, but not to the formation of SBIs.

3.2. Effect of inversions on aerosol concentrations

The physical and chemical processes involved in the formation of aerosol CN are complex, especially during the day. Sources of mixed regional aerosols at the SGP CF may include sulfates from the oil refinery, power plant, and vehicular traffic SO₂ emissions, smoke from local/regional agricultural burning, dust from desert regions, and the photochemically-driven production of organic or

N-containing particles. Meteorological parameters such as wind, cloud, relative humidity, and precipitation strongly influence the formation and transportation of aerosols, and are dependent on the large-scale synoptic pattern. Under the same large-scale synoptic atmospheric circulation conditions, especially at night, the effects of the above factors on the formation and transportation of aerosols are similar. Therefore, the following analysis is mainly focused on the accumulation of aerosol CN concentrations and its relationship with nighttime inversions for different large-scale synoptic patterns.

Table 5 shows the results of the one-way ANOVA and the

Table 5. Results from the one-way ANOVA and the LSD test for differences in mean aerosol CN concentrations in the presence of an SBI, an EI, and when there is no inversion (NOI) during nighttime.

SGP	Night aerosol CN concentrations (cm ⁻³)		
	Total	Mean	SD
SBI	3079	4900	2121
EI	1000	3698	1928
NOI	538	3849	2023
F		159.1	

LSD Test	DM	LSD	SSD
	SBI & NOI	193	1051
SBI & EI	148	1203	Yes
EI & NOI	206	152	No

*NOI no inversion, DM difference in means, SSD statistically significant difference. LSD test at the 0.05 significance level.

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Table 6. Mean aerosol concentrations for all profiles, all nighttime profiles only, nighttime SBIs, nighttime profiles without SBIs, and increasing rates in aerosol concentrations (in %) for the six synoptic patterns. Mean aerosol concentrations below (above) normal are marked by # (##). The significance level of the *F*-test is 5%.

Weather patterns	Aerosol concentrations (cm ⁻³)										Increasing rate (%)
	All		Night		Night SBI		Night EI		Night No-SBI		
	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	
CC (00)	4099	2564	3799	1967	4041 [#]	2042	3272 [#]	1640	3480	1820	16.1
WP (02)	4202	2147	4247	1796	4523 [#]	1808	3987	1802	3688	1644	22.6
CB (04)	4306	2548	4054	1889	4526	2105	3633	1673	3635	1567	24.5
CF (32)	4512	2987	4063	2341	5181	2382	3301	1904	3264	1963	58.7
AE (34)	5252 ^{##}	2486	5318 ^{##}	2233	5544	2252	4568 ^{##}	1961	4271	1823	29.8
AC (43)	5471 ^{##}	2809	4908 ^{##}	2048	5217	1968	4313 ^{##}	1948	4239 ^{##}	2067	23.7
<i>F</i>	28.1		23.2		14.3		5.2		4.1		

LSD test for differences in the mean aerosol CN concentrations in the presence of an SBI, an EI, and when there is no inversion using 10 years of nighttime radiosonde profiles without considering synoptic patterns. At night, the *F*-statistic is 159.1, which means that mean aerosol CN number concentrations are statistically correlated with the presence of an SBI at the 95% confidence level. The various LSD tests results show that there are significant differences in mean aerosol CN number concentrations for the SBI/NOI and SBI/EI cases (difference in means, $DM < LSD$). For the EI/NOI case, however, there is no significant difference ($DM > LSD$).

Table 6 summarizes the mean aerosol CN concentrations from all profiles, all nighttime profiles only, nighttime profiles containing SBIs only, nighttime profiles containing EIs only, and nighttime profiles without SBIs (including EI and NOI) for the six synoptic patterns. Statistical differences in aerosol CN concentrations among the synoptic patterns were also examined by applying one-way ANOVA and the LSD test. Differences in mean aerosol CN concentrations for the six synoptic patterns are statistically significant at the 95% confidence level, except when there are no SBIs (*F*-value = 4.1). AC and AE patterns have the highest values of mean aerosol CN concentrations (shaded in black), and cyclonic patterns (CC, CB, and WP) have the lowest values of mean aerosol CN concentrations. This difference is particularly significant for "all profiles" and "nighttime only" profiles (*F*-values are 28.1 and 23.2, respectively). Mean aerosol CN concentrations for AC and AE patterns are over 5000 cm⁻³, which is significantly higher than those for the other synoptic patterns. Mean aerosol CN concentrations during the night with SBIs, EIs, and without SBIs are similar, but the overall difference is smaller (*F*-values are 14.3, 5.2, and 4.1, respectively).

Another important feature of the results presented in Table 6 is the impact of SBIs and EIs on aerosols for the six synoptic patterns. Aerosol CN concentrations in the presence of an SBI, an EI, and when there is no SBI are examined using the above statistical methodology. *F*-values for all categories are greater than 7.0 and LSD tests also show that there are significant differences in mean aerosol CN number concentrations for the SBI/no-SBI and SBI/EI classes. In

order to quantitatively assess this impact, mean aerosol CN concentrations during the night with and without SBIs were compared. Mean aerosol CN concentrations when nighttime SBIs are present are significantly greater than those without SBIs for all synoptic patterns, and the increase in percentage is different. For anticyclonic patterns, mean aerosol CN concentrations are the greatest whether an SBI occurred or not. Mean aerosol CN concentrations when an SBI is present are 23.7% and 29.8% higher than when there is no SBI for AC and AE patterns, respectively. For cyclonic patterns, mean aerosol CN concentrations are lower whether an SBI occurred or not. Percentage increases for CC, WP, and CB patterns are 16.1%, 22.6%, and 24.5%, respectively. The mean aerosol CN concentrations for the CF pattern is 58.7% higher when an SBI is present than when there is no SBI. This is the highest percentage value calculated for all patterns.

The differences in aerosol mean CN concentrations for anticyclonic synoptic patterns can be attributed to the enhancement of static stability in the lower atmosphere under anticyclonic synoptic conditions, which constrains the diffusion of aerosols and favors the accumulation of aerosols near the ground. Cyclonic synoptic patterns associated with convergence and ascending motion near the ground are conducive to the vertical transport and diffusion of aerosols. TIAI index values and temperature gradients of SBIs for cyclonic synoptic patterns are relatively low, so the ability of SBIs to trap aerosols near the ground is weaker. For anticyclonic synoptic patterns, the activity and static stability of SBIs are relatively stronger, so SBIs can more effectively constrain the diffusion of aerosols to near the ground. The activity and static stability of SBIs is strong before the passage of a cold front, and almost all SBIs occurred under these conditions, so aerosol CN concentrations at the SGP CF were particularly high then. After the passage of a cold front, aerosol CN concentrations reduce rapidly, due to scavenging effects of the cold front on aerosols. This explains why mean aerosol CN concentrations when SBIs are present are much higher than when no SBI is present for the CF pattern.

The analysis of the effects of SBIs on aerosol CN concentrations presented above demonstrates that the static stability in the lower atmosphere directly affects the accumulation of

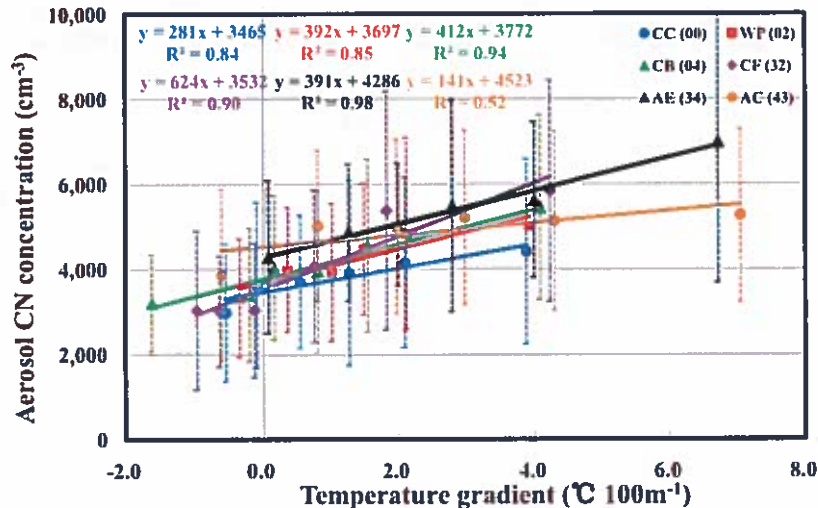


Fig. 3. Aerosol CN concentrations as a function of temperature gradient in the lower atmosphere for the six synoptic patterns. Color-coded linear regression functions are shown.

aerosols near the ground. Li (2012) confirmed that the temperature gradient is the most relevant of inversion parameters with regard to the nighttime surface accumulation of aerosols. A quantitative examination of the relationship between temperature gradient (rate of temperature increase across an SBI or from the surface to 300 m above) and aerosol CN concentrations at night for different synoptic patterns was done. Figure 3 shows that a positive linear relationship exists between temperature gradient and aerosol CN concentrations for all six synoptic patterns. The slopes of the linear equations represent the rate of change of aerosol CN concentrations with temperature gradient and the intercepts represent mean aerosol CN concentrations in a quasi-neutral lower atmosphere. This confirms that the temperature gradient directly affects the diffusion of aerosols near the ground. Mean aerosol CN concentrations in a quasi-neutral lower atmosphere and rates of aerosol change are different for different synoptic patterns. For the CC pattern, both the rate of aerosol change [$281 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1} (100 \text{ m})^{-1}$] and mean aerosol concentrations (3465 cm^{-3}) are low, so the effect of this synoptic atmospheric circulation pattern on aerosols is weak. For the WP, CB, and AC patterns, rates of aerosol change are almost the same [$\sim 400 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1} (100 \text{ m})^{-1}$] and significantly higher than seen when a CC pattern is present. Mean aerosol CN concentrations are different, so the ability of SBIs to trap aerosols near the ground is stronger. The rate of aerosol change under CF conditions [$624 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1} (100 \text{ m})^{-1}$] is the highest because the passage of a cold front dramatically changes the static stability in the lower atmosphere. Contrary to expectations, the rate of aerosol change for the AC pattern [$141 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1} (100 \text{ m})^{-1}$] is the lowest ($R^2 = 0.52$). An explanation may be that this kind of synoptic pattern is associated with strong horizontal divergence and subsidence in the lower troposphere. This synoptic pattern is conducive to the accumulation of aerosols near the ground, so the effect of SBIs on aerosols is independent of temperature gradient.

The influence of synoptic patterns on aerosol CN concentrations is strong. Anticyclonic patterns are associated with higher aerosol concentrations and cyclonic patterns are associated with lower aerosol concentrations. The presence of an SBI results in increased aerosol CN concentrations for all synoptic patterns, but the magnitude of the change in aerosol CN concentrations is different among the different synoptic patterns. The passage of a cold front has a strong scavenging effect on aerosols. There are significant relationships between temperature gradient and aerosol CN concentrations under the same large-scale synoptic pattern, and these relationships are different for different synoptic patterns. This information may be useful for air pollution diffusion modeling.

4. Conclusions

Using the SOM weather classification method, 10 years of atmospheric profiles and aerosol CN concentration data from the SGP CF and the sea level pressure product from the NARR were used to examine the statistical characteristics of inversions and to quantify the impact of inversions on aerosol CN concentrations for different large-scale synoptic patterns. The main findings are:

(1) The highest frequency, activity, and intensity of SBIs are associated with anticyclonic patterns. EIs occur most frequently and are more intense under anticyclonic and CF conditions.

(2) An examination of the vertical distributions of inversion frequency for the six synoptic patterns further confirms that synoptic patterns affect the activity and intensity of inversions. The vertical distribution of inversions varies diurnally. At night, a peak in inversion frequency is seen between the ground and 100 m, and during the day, a peak is seen between 300 m and 700 m.

(3) Mean aerosol CN concentrations are highest for anti-

cyclonic patterns and are lowest for cyclonic patterns. This is partly because anticyclonic conditions increase the static stability in the lower atmosphere and cyclonic conditions are associated with convergence and ascending air motion near the ground. During the night, SBIs are one of the key factors that influence the accumulation of aerosols. The degree of change in aerosol CN concentrations is greater for anticyclonic patterns than for cyclonic patterns, and is the highest for the CF pattern.

(4) The temperature gradient in the lower atmosphere correlates fairly well with aerosol concentrations near the ground for all synoptic patterns, but rates of aerosol concentration change with temperature gradient are significantly different. The rate of aerosol concentration change is $\sim 400 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1}$ (100 m) $^{-1}$ for the WP, CB and AC patterns, and $\sim 280 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1}$ (100 m) $^{-1}$ for the CC pattern. Due to the strong scavenging effect of a cold front, the rate of aerosol concentration change is the highest [$\sim 620 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1}$ (100 m) $^{-1}$] under this synoptic condition. The lowest rate of aerosol concentration change [$140 \text{ cm}^{-3} \text{ }^\circ\text{C}^{-1}$ (100 m) $^{-1}$] is found when an AC atmospheric circulation pattern is in place.

Overall, these results provide strong evidence regarding the behavior of inversions and their effects on aerosols for different large-scale synoptic patterns and provide general insight into the relationship between temperature gradients in the lower atmosphere and aerosols near the ground. Quantitative assessments of inversion statistics, the impact of SBIs on aerosol CN concentrations, and the relationships between temperature gradients and aerosol concentrations are important for modeling and predicting the diffusion of aerosols near the ground under different synoptic conditions. A generalized additive model approach is an effective tool to develop air pollutant models based on historical pollutant concentrations, and meteorological and other relevant data. This approach has been used to model and predict daily air pollutants (Carslaw et al., 2007). Using the results of this study combined with the generalized additive model approach, we plan to develop aerosol diffusion models to more effectively assess relationships between inversions and aerosols, and to more accurately predict aerosol concentrations near the ground under different large-scale synoptic atmospheric circulation conditions.

Acknowledgements. The data used in this work were made available by the Atmospheric Radiation Measurement (ARM) Program sponsored by the U.S. Department of Energy (DOE). This work was supported by the Ministry of Science and Technology of China (Grant Nos. 2010CB950804 and 2013CB955801), the "Strategic Priority Research Program" of the Chinese Academy of Sciences (Grant No. XDA05100300), and the National Natural Science Foundation of China (Grant No. 41305011).

REFERENCES

- Bailey, A., T. N. Chase, J. J. Cassano, and D. Noone, 2011: Changing temperature inversion characteristics in the US Southwest and relationships to large-scale atmospheric circulation. *J. Appl. Meteor. Climatol.*, **50**(6), 1307–1323.
- Carslaw, D. C., S. D. Beevers, and J. E. Tate, 2007: Modeling and assessing trends in traffic-related emissions using a generalized additive modeling approach. *Atmos. Environ.*, **41**(26), 5289–5299.
- Cassano, J. J., P. Uotila, and A. Lynch, 2006: Changes in synoptic weather patterns in the polar regions in the twentieth and twenty-first centuries, Part I: Arctic. *Inter. J. Climatol.*, **26**(8), 1027–1049.
- Cheng, C. S. Q., and Coauthors, 2007: A synoptic climatological approach to assess climatic impact on air quality in south-central Canada. Part I: Historical analysis. *Water Air, and Soil Pollution*, **182**(1–4), 131–148.
- Dong, X. Q., P. Minnis, and B. K. Xi, 2005: A climatology of midlatitude continental clouds from the ARM SGP Central Facility: Part I: Low-level cloud microphysical, microphysical, and radiative properties. *J. Climate*, **18**(9), 1391–1410.
- Fedorovich, E., P. Kaiser, M. Rau, and E. Plate, 1996: Wind tunnel study of turbulent flow structure in the convective boundary layer capped by a temperature inversion. *J. Atmos. Sci.*, **53**(9), 1273–1289.
- Fisher, R. A., 1966: *The Design of Experiments*. 8th ed., Hafner Publishing Company, New York, 248 pp.
- Hewitson, B. C., and R. G. Crane, 2002: Self-organizing maps: Applications to synoptic climatology. *Climate Research*, **22**(1), 13–26.
- Holdridge, D., J. Prell, M. Ritsche, and R. Coulter, 2011: Balloonborne sounding system (BBSS) handbook. DOE ARM Tech. Rep. TR-029, 11 pp. [Available online at http://www.arm.gov/publications/tech_reports/handbooks/sonde_handbook.pdf?id=66.]
- Holzworth, G. C., 1972: Vertical temperature structure during 1966 Thanksgiving week air-pollution episode in New York City. *Mon. Wea. Rev.*, **100**(6), 445–450.
- Huth, R., C. Beck, A. Philipp, M. Demuzere, Z. Ustrnul, M. Cahynov, J. Kysely, and O. E. Tveito, 2008: Classifications of atmospheric circulation patterns recent advances and applications. *Trends and Directions in Climate Research*, L. Gimeno, R. Garcia-Herrera, and R. M. Trigo, Eds., Blackwell Publishing, Oxford, 105–152.
- Janhäll, S., K. F. G. Olofson, P. U. Andersson, J. B. C. Pettersson, and M. Hallquist, 2006: Evolution of the urban aerosol during winter temperature inversion episodes. *Atmos. Environ.*, **40**(28), 5355–5366.
- Jefferson, A., cited 2014: Aerosol observing system handbook. [Available online at http://www.arm.gov/Publications/tech_reports/handbooks/aos_handbook.pdf.]
- Kahl, J. D., 1990: Characteristics of the low-level temperature inversion along the Alaskan Arctic coast. *Inter. J. Climatol.*, **10**(5), 537–548.
- Kohonen, T., 1998: The self-organizing map. *Neurocomputing*, **21**, 1–6.
- Li, J., 2012: Analysis of the interactions between atmospheric temperature inversion and aerosols using ARM data. PhD Thesis, Key Laboratory of Middle Atmosphere and Global Environment Observation, Institute of Atmospheric Physics, Chinese Academy of Sciences, 60–65.
- Malek, E., T. Davis, R. S. Martin, and P. J. Silva, 2006: Meteorological and environmental aspects of one of the worst national air pollution episodes (January, 2004) in Logan, Cache Valley, Utah, USA. *Atmospheric Research*, **79**(2), 108–122.
- Milionis, A. E., and T. D. Davies, 1992: A 5-Year climatology of

- elevated inversions at Hemsby (UK). *Inter. J. Climatol.*, **12**(2), 205–215.
- Milionis, A. E., and T. D. Davies, 2008: The effect of the prevailing weather on the statistics of atmospheric temperature inversions. *Inter. J. Climatol.*, **28**(10), 1385–1397.
- Pearce, J. L., J. Beringer, N. Nicholls, R. J. Hyndman, P. Uotila, and N. J. Tapper, 2011: Investigating the influence of synoptic-scale meteorology on air quality using self-organizing maps and generalized additive modeling. *Atmos. Environ.*, **45**(1), 128–136.
- Pope, C. A., D. W. Dockery, X. Xu, F. E. Speizer, J. D. Spengler, and B. G. Ferris, 1993: Mortality risks of air-pollution—a prospective cohort study. *Am. Rev. Respir. Dis.*, **147**(4), A13–A13.
- Serreze, M. C., J. D. Kahl, and R. C. Schnell, 1992: Low-level temperature inversions of the Eurasian Arctic and comparisons with Soviet drifting station data. *J. Climate*, **5**(6), 615–629.
- Sheridan, P. J., D. J. Delene, and J. A. Ogren, 2001: Four years of continuous surface aerosol measurements from the Department of Energy's Atmospheric Radiation Measurement Program Southern Great Plains Cloud and Radiation Testbed site. *J. Geophys. Res.*, **106**(D18), 20735–20747.
- Wallace, J., D. Corr, and P. Kanaroglou, 2010: Topographic and spatial impacts of temperature inversions on air quality using mobile air pollution surveys. *Science of the Total Environment*, **408**(21), 5086–5096.
- Watanabe, O., 1998: Air Pollution Control Technology Manual. [Available online at <https://www.env.go.jp/earth/coop/coop/document/01-apctme/contents.html>]
- Wendisch, M., S. Mertes, A. Ruggaber, and T. Nakajima, 1996: Vertical profiles of aerosol and radiation and the influence of a temperature inversion: Measurements and radiative transfer calculations. *J. Appl. Meteor.*, **35**(10), 1703–1715.

BRUXEL USA INC., WYB100676, RAN 3 Project, 10/2/18



Overview of 5 potential sinkholes in the reuse pond.



Four sinkholes pictured in the reuse pond.

BRUXEL USA INC., WYB100676, RAN 3 Project, 10/11/18



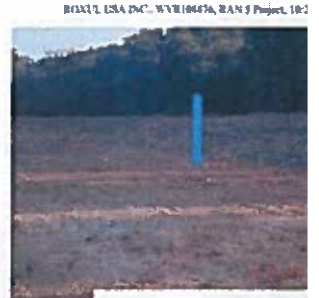
Problems with earth berm and blue tarp protection identified in the reuse pond.



Sinkhole in Basin #1



Overview of sinkhole in sediment basin #1.



1 of 5 potential sinkholes pictured in the reuse pond.

Sent: Tuesday, January 24, 2017 2:45 PM

Subject: FW: 10:30 to 11:00 am Calls for sink hole questions and solid waste disposal

Project Shuttle Agenda 11:00 am

January 26-27, 2017

Depart



Two potential sinkholes pictured with earth berm protection in sediment basin #2.



Sinkhole in basin #2.

BRUXEL USA INC., WYB100676, RAN 3 Project, 10/11/18



Sinkhole # 7 capped with concrete deep inlet structure.

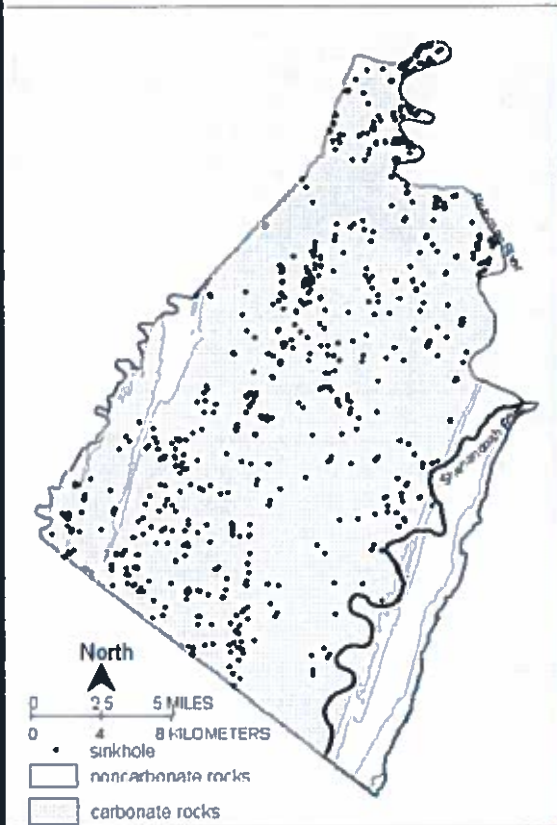
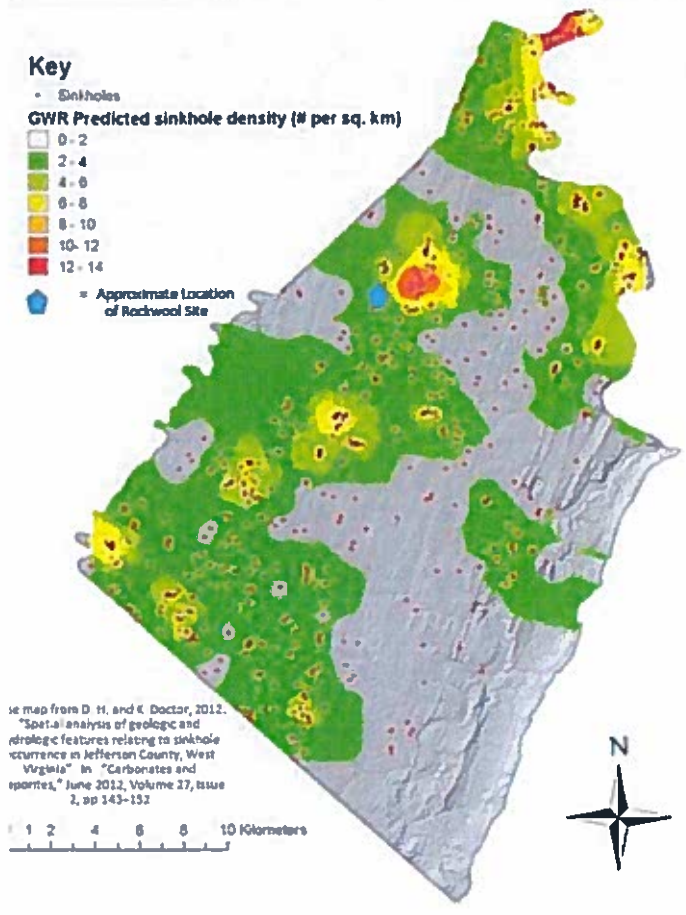


Close-up view of potential sinkhole located in the reuse pond with protection.



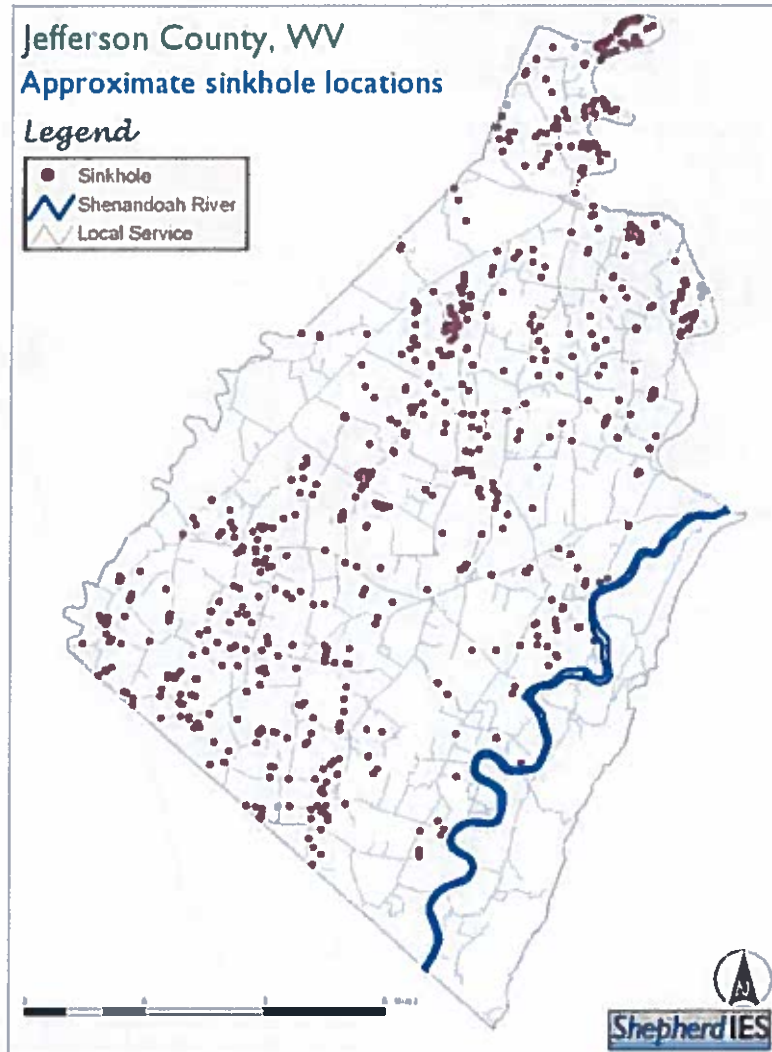
Sinkhole in sediment basin #1 with earth berm protection installed.

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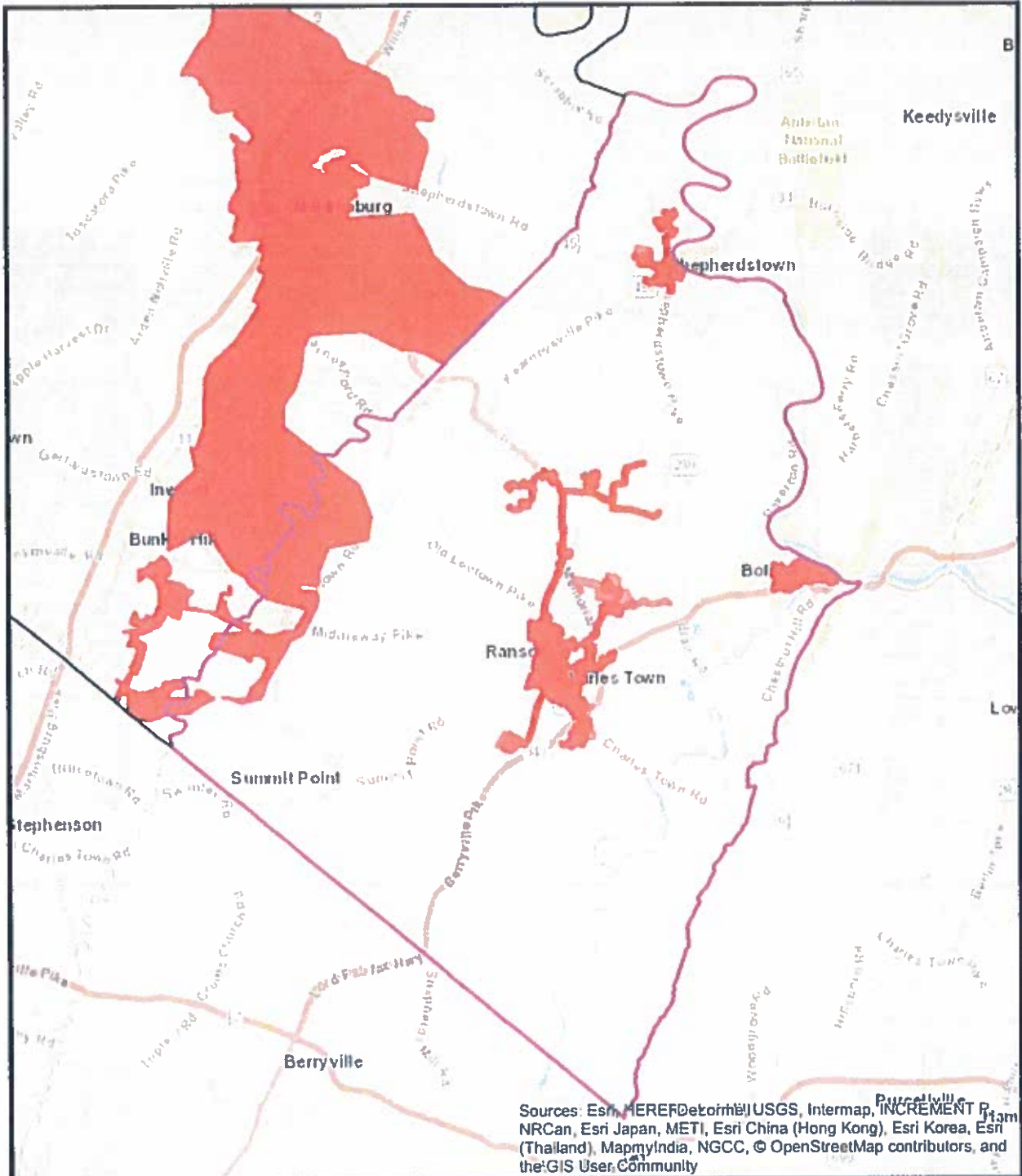


Sinkhole mapping (Kozar and others, 1991)

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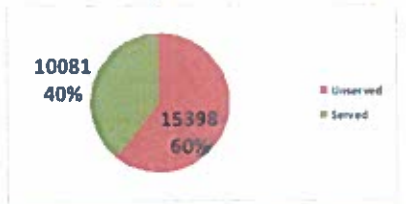


2017 IJDC Needs Assessment



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Distribution of Service to Structures



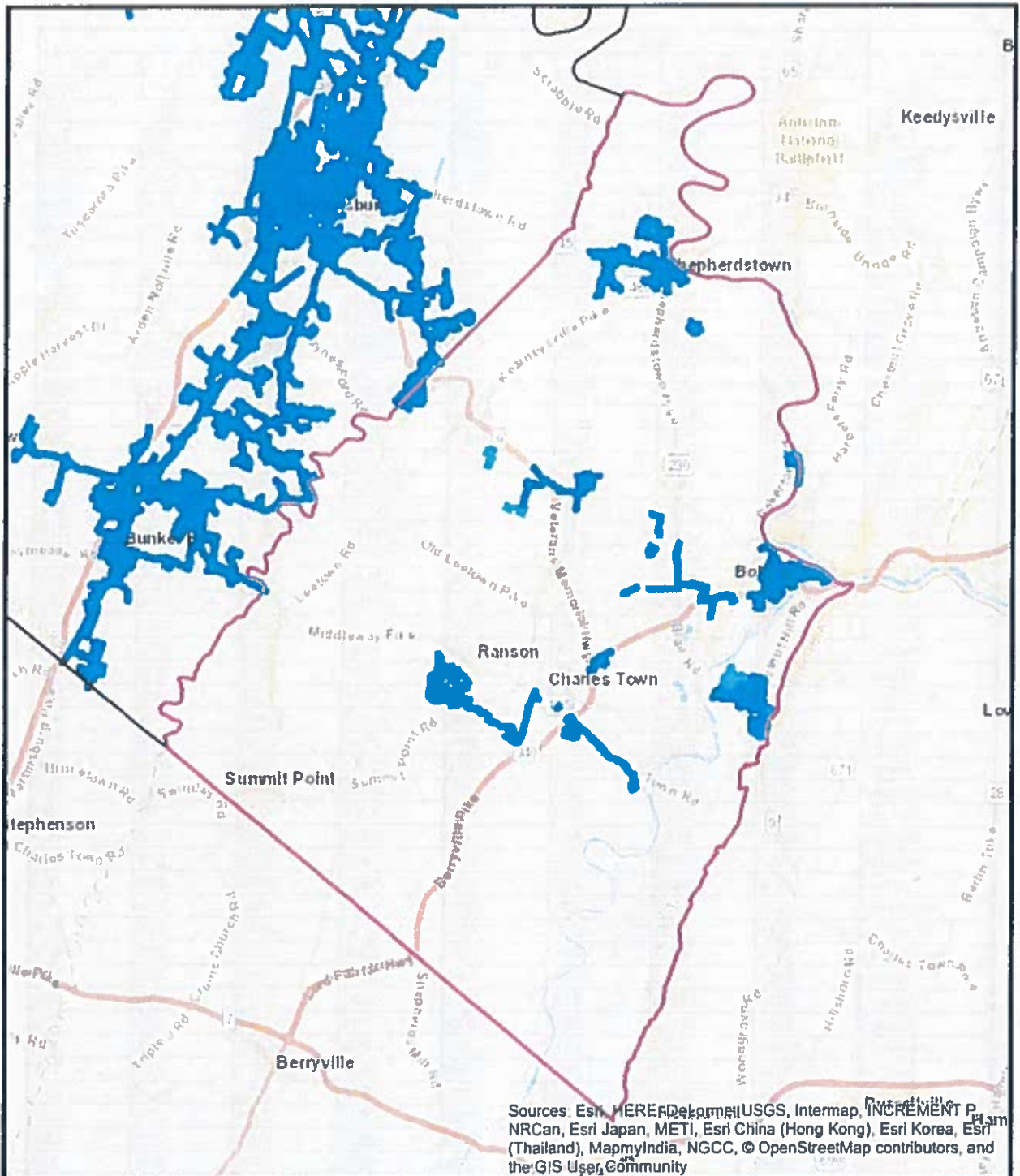
Served Area

Sewer Service Area Jefferson County

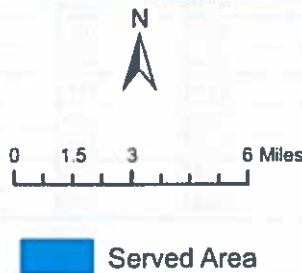
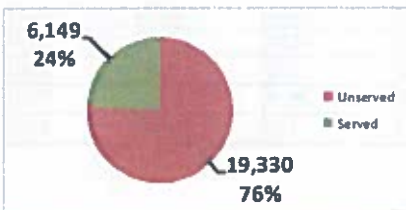


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2017 IJDC Needs Assessment



Distribution of Service to Structures



Water Service Area
Jefferson County



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Appendix F
Served/Unserved Structures (by County)

WVJDC 2017 Needs Assessment

County	Water				Sewer			
	Unserved	Served	% no	% yes	Unserved	Served	% no	% yes
Barbour	2992	7220	29%	71%	7559	2653	74%	26%
Berkeley	7915	18192	30%	70%	13273	12834	51%	49%
Boone	1708	10590	14%	86%	9664	2634	79%	21%
Braxton	10994	5392	67%	33%	14290	2096	87%	13%
Brooke	9065	10912	45%	55%	7774	12203	39%	61%
Cabell	1373	19890	6%	94%	5766	15497	27%	73%
Calhoun	1635	1087	60%	40%	2212	510	81%	19%
Clay	4940	4828	51%	49%	9284	484	95%	5%
Doddridge	7373	1732	81%	19%	8396	709	92%	8%
Fayette	5118	18446	22%	78%	11213	12351	48%	52%
Gilmer	2661	1541	63%	37%	3550	652	84%	16%
Grant	3712	4169	47%	53%	6008	1873	76%	24%
Greenbrier	12874	9166	58%	42%	11327	10713	51%	49%
Hampshire	12398	3221	79%	21%	12883	2736	82%	18%
Hancock	4766	10471	31%	69%	2998	12239	20%	80%
Hardy	2638	2220	54%	46%	3869	989	80%	20%
Harrison	6446	31440	17%	83%	15841	22045	42%	58%
Jackson	9399	6476	59%	41%	10225	5650	64%	36%
Jefferson	19330	6149	76%	24%	15398	10081	60%	40%
Kanawha	15156	83909	15%	85%	19141	79924	19%	81%
Lewis	8169	12319	40%	60%	14370	6118	70%	30%
Lincoln	5616	6038	48%	52%	10178	1476	87%	13%
Logan	4608	20372	18%	82%	20284	4696	81%	19%
Marion	6526	31227	17%	83%	15073	22680	40%	60%
Marshall	4620	3938	54%	46%	4195	4363	49%	51%
Mason	2542	4927	34%	66%	5146	2323	69%	31%
McDowell	7017	13764	34%	66%	17044	3737	82%	18%
Mercer	7218	26625	21%	79%	15054	18789	44%	56%
Mineral	4672	2495	65%	35%	2931	4236	41%	59%
Mingo	3856	15374	20%	80%	13082	6148	68%	32%
Monongalia	5175	46231	10%	90%	14900	36506	29%	71%
Monroe	1848	1847	50%	50%	2764	931	75%	25%
Morgan	13901	2595	84%	16%	13543	2953	82%	18%
Nicholas	4967	12088	29%	71%	12569	4486	74%	26%
Ohio	4591	14586	24%	76%	5331	13846	28%	72%
Pendleton	4174	1762	70%	30%	5486	450	92%	8%
Pleasants	3519	2851	55%	45%	4754	1616	75%	25%
Pocahontas	6668	1653	80%	20%	6920	1401	83%	17%
Preston	3968	4663	46%	54%	6336	2295	73%	27%
Putnam	3939	12498	24%	76%	6612	9825	40%	60%
Raleigh	8605	13812	38%	62%	9711	12706	43%	57%
Randolph	11432	5497	68%	32%	10230	6699	60%	40%
Ritchie	9233	3189	74%	26%	9609	2813	77%	23%
Roane	9990	6601	60%	40%	14560	2031	88%	12%
Summers	10791	5943	64%	36%	14635	2099	87%	13%
Taylor	947	3176	23%	77%	2884	1239	70%	30%
Tucker	5991	2495	71%	29%	5881	2605	69%	31%
Tyler	2521	3454	42%	58%	3401	2574	57%	43%
Upshur	3603	10225	26%	74%	9095	4733	66%	34%
Wayne	10633	20670	34%	66%	21825	9478	70%	30%
Webster	2154	2312	48%	52%	2782	1684	62%	38%
Wetzel	5604	3950	59%	41%	4720	4834	49%	51%
Wirt	3492	3086	53%	47%	5380	1198	82%	18%
Wood	23471	19241	55%	45%	9183	33529	21%	79%
Wyoming	7588	12187	38%	62%	14997	4778	76%	24%

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NorthPort Station Feasibility Study

NORTHPORT STATION



Submitted to:
Hagerstown/Eastern Panhandle MPO
City of Ranson, West Virginia



Submitted by:
Michael Baker Jr., Inc.
a Michael Baker International company

Michael Baker
INTERNATIONAL



June 16, 2015

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Acknowledgements

Hagerstown Eastern Panhandle Metropolitan Planning Organization



City of Ranson



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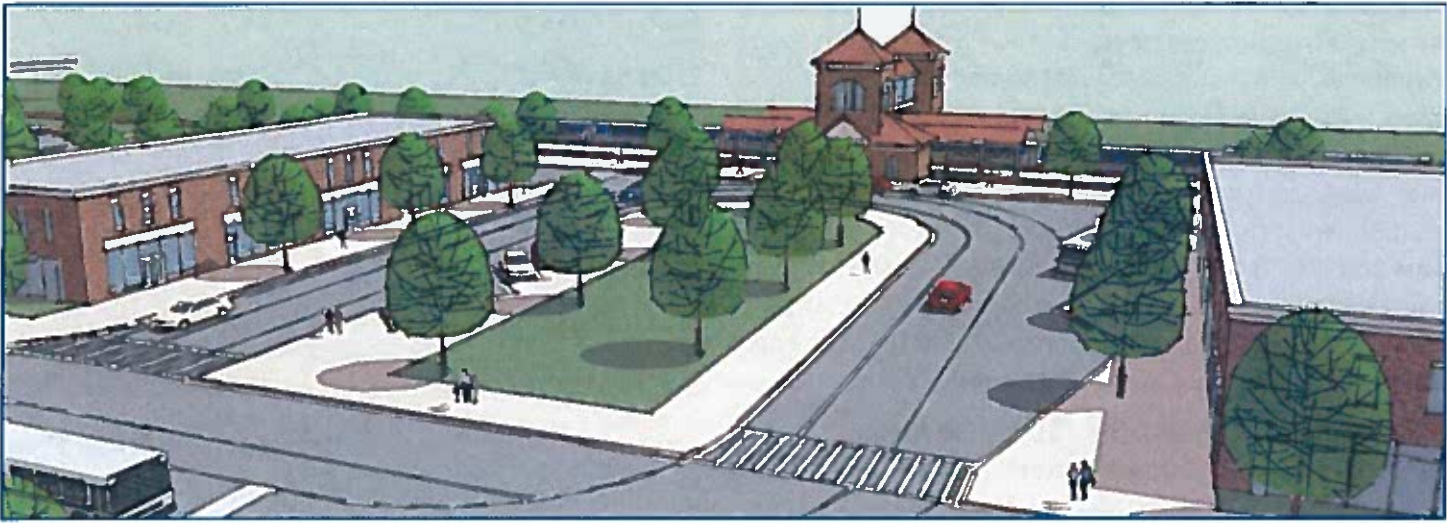
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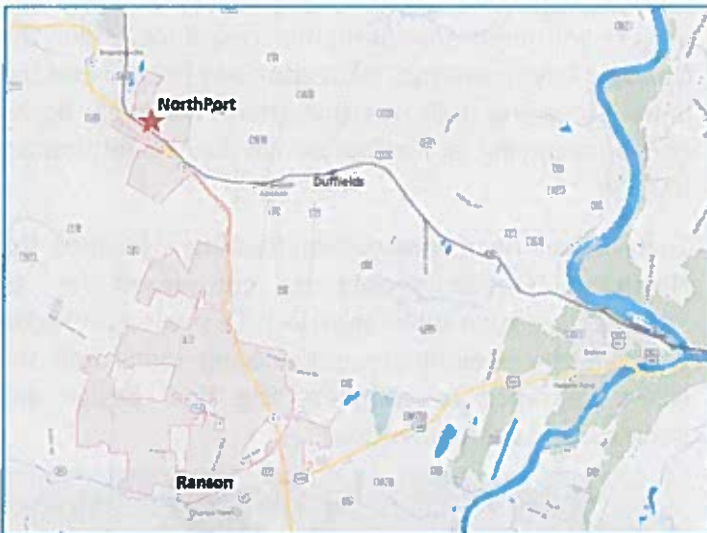
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Northport Station – Executive Summary



Background

NorthPort Station is a new MARC transit station and EPTA bus transfer center envisioned for the City of Ranson on the Jefferson Orchards property abutting Route 9 and the CSX railroad tracks.



The station includes a stand-alone building with an integrated pedestrian bridge that will replace the Duffields stop along MARC’s Brunswick Line. The NorthPort Station has strong support from West Virginia’s congressional delegation and state legislators. The West Virginia State Rail Authority has passed a resolution supporting the station relocation and has agreements with MARC and CSX. These efforts have led to this feasibility study that will be followed by the engineering and construction of the new station.

Regional Importance

NorthPort Station is the centerpiece of the region’s “*smart growth*” vision and sustainable, transit oriented development (TOD) planning efforts. The accessibility of regional commuter rail service will attract developers to Jefferson Orchards. The property has approved and vested plans of mixed use zoning that will support economic development opportunities in the region.

The multi-modal facility will also serve as an EPTA bus transfer center that can be integrated with an enhanced bus route system to Martinsburg, Ranson, Charles Town and Harpers Ferry. The station will include bike and pedestrian facilities providing access to the TOD neighborhood and the regional bike path along Route 9.

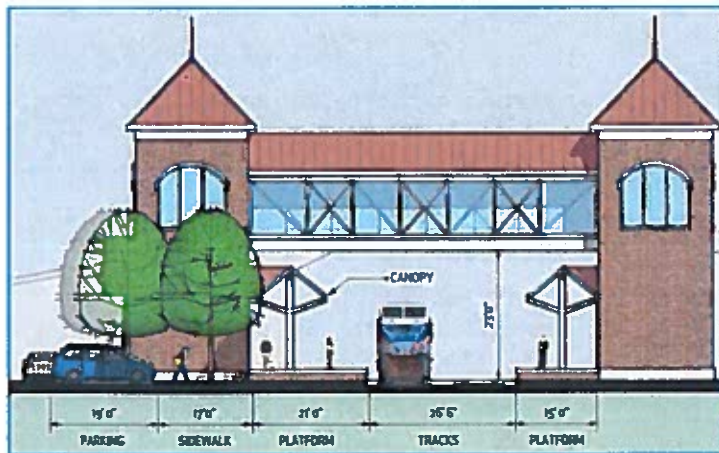


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NorthPort Station Site Layout and Costs

This feasibility study identifies a preferred location, for the station, a phased site plan with commercial building structures, estimated costs, traffic impacts on existing roadways, and a station development implementation plan. The NorthPort Station Task Force provided guidance and direction in developing the station area site plan and specific station design elements. The station will include ample parking spaces, an integrated bus transfer facility, a station building, 400' platforms with canopies, and a pedestrian bridge. The station is designed to fit the area's historical character. The costs of the initial site layout and station are:

- Preliminary Engineering - \$1.5 – 2.0 Million
- Final Design and Construction - \$11.1 – 14.3 Million



Ridership Projections

Short term MARC ridership projections at NorthPort Station have been estimated based on diversions from other nearby MARC stations, integration of EPTA bus services, anticipated housing growth in the region, and potential commercial and entertainment districts along the Route 9 corridor. Additional ridership growth, beyond that estimated for the short term conditions, will be correlated to the planned TOD development at the Jefferson Orchards property with additional housing, office and commercial growth. Daily MARC ridership projections were estimated as:

- Short term ridership = 410 riders/day
- Long term ridership = 980 riders/day

Future AMTRAK service at NorthPort Station could provide additional ridership demand and incentives for development at the site.



Implementation Plan

The first step in the implementation of the NorthPort Station is to identify and assemble a funding package for the preliminary design and engineering pursuing all sources of private, local, and state funding that may be used to match federal grant programs. After the initial funding is secured for the project engineering, negotiations should be escalated with MARC and CSX for their approval on the selected alternative. The project will need environmental clearance under the National Environmental Protection Act (NEPA) and the initial screening indicates that there will likely be no issues, receiving a Finding of No Significant Impact (FONSI).

To save time once construction funding is secured, the NorthPort Station should be considered for an alternative design-build approach (a single contractor is given the preliminary engineering plans and the NEPA clearance to complete the final design and construction simultaneously).



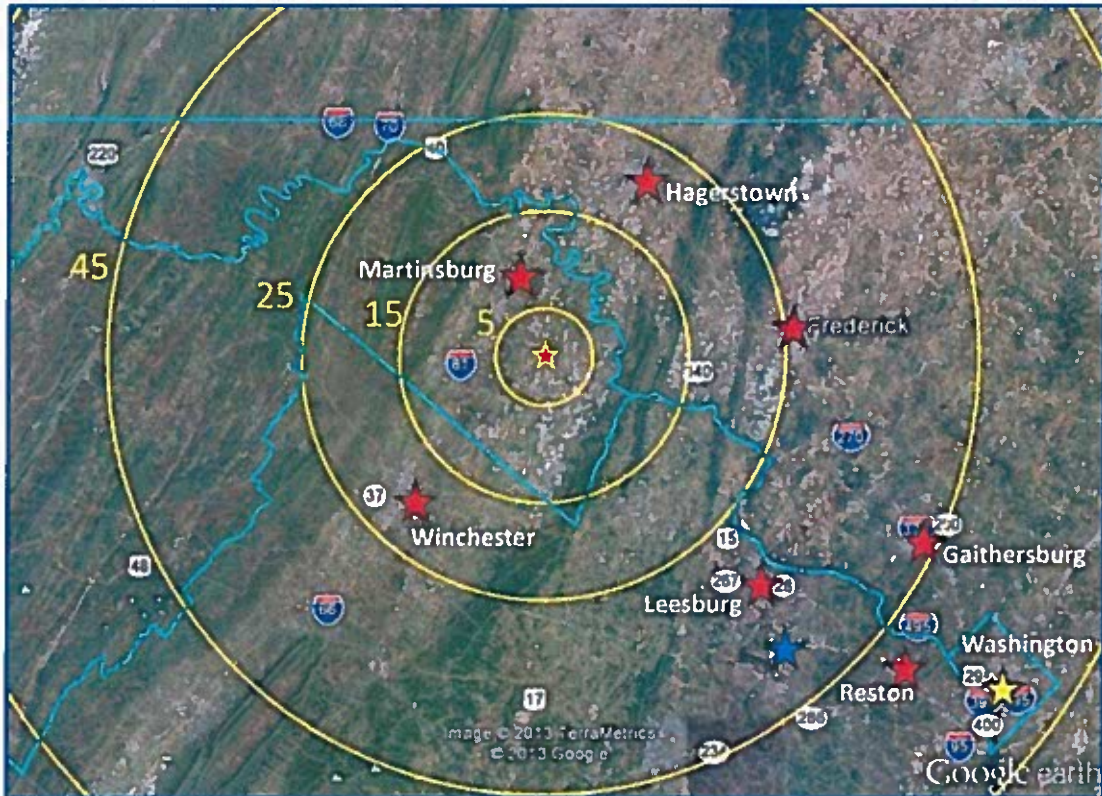
For Additional Information on the NorthPort Station Feasibility Study
www.hepmpo.net/Northport

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Introduction

The City of Ranson is an innovative and growing city located in the Eastern Panhandle of West Virginia in Jefferson County. The city is strategically located 65 miles from both Baltimore, MD and Washington, D.C. as mapped in *Figure 1*. It is included in the Washington, D.C. Metropolitan Statistical Economic Area with easy access to Frederick, MD and the Dulles technology corridors.

Figure 1 – Ranson’s Location and Distance from Metropolitan Areas



Ranson’s planning efforts provide a vision focusing on Sustainable Communities and Complete Streets to revitalize the effects of manufacturing closures and vacant industrial sites. The Ranson and Charles Town communities are serving as a national model for small rural cities on the fringe of a major metropolitan area by fostering sustainable economic development, transit and community livability through their planning efforts and infrastructure investments. Working closely with federal and state agencies, Ranson has leveraged significant grant and local funding to create a new vision and plan for smart growth. This includes Ranson’s use of a HUD Sustainable Communities Challenge Grant, a U.S. EPA Brownfields Area-Wide Planning Grant and other resources to create the Ranson Comprehensive Land Use Plan, a Ranson “Smart Code,” and a site use plan for the Jefferson Orchards property as described in this report.

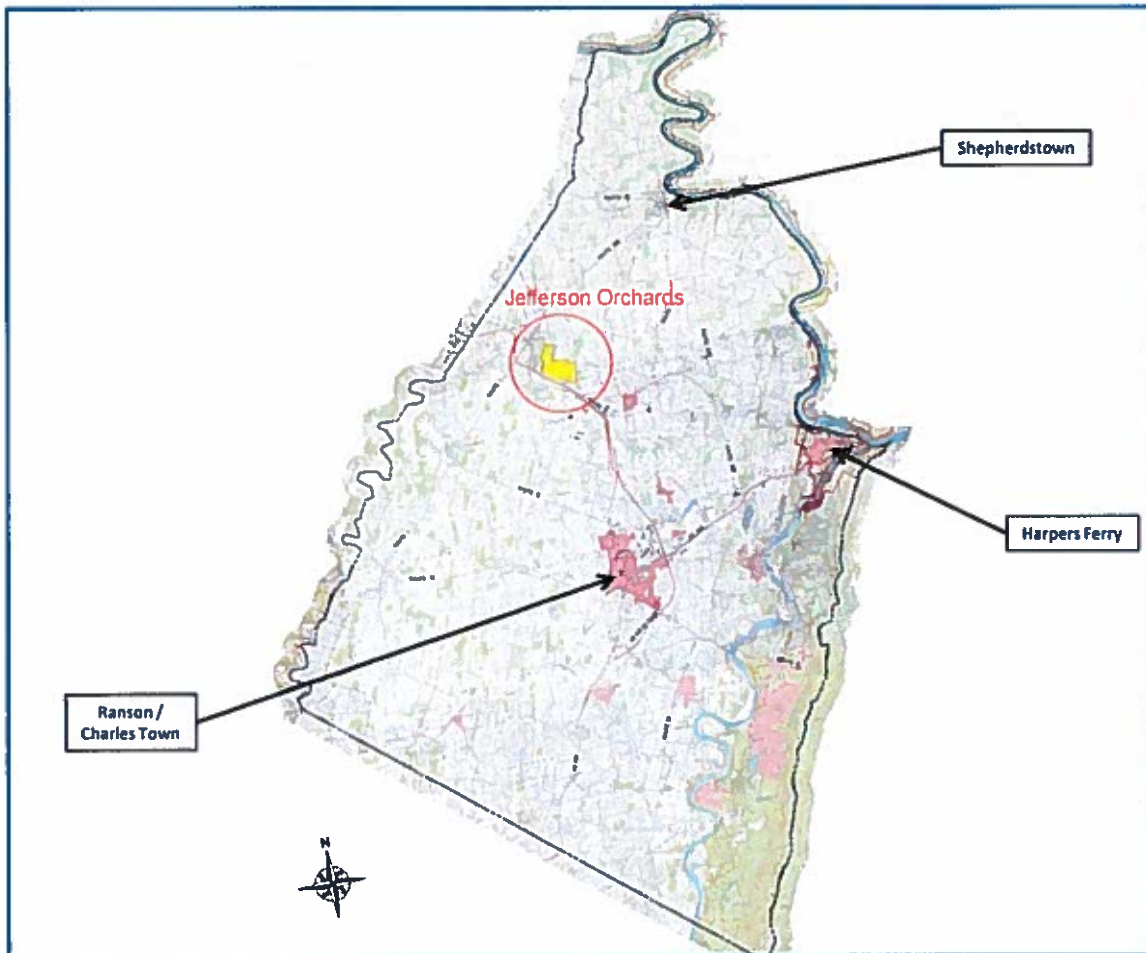


Jefferson Orchards

Within the 2012 Ranson Comprehensive Plan, the Jefferson Orchards property is highlighted as one of the major development projects within the region. The project is expected to provide economic development opportunities in the region including jobs in the technology, manufacturing, service and tourism industries. The planned neighborhood will contain a balance mix of activities to meet the needs of all its residents and will be designed to support the use of transit.

The Jefferson Orchards property consists of 389 acres in Jefferson County abutting Route 9 and the CSX railroad tracks that also service the MARC Brunswick Line. The location of the property is highlighted in *Figure 2*. Under the adopted "Ranson Smart Code" land development ordinance, the Jefferson Orchards site has obtained full zoning and site plan entitlements from the City of Ranson to include commercial, residential and industrial mixed uses. The Transit Oriented Development (TOD) plan provides a smart growth vision for the property focused around a new MARC commuter station.

Figure 2 – Location of the Jefferson Orchard Property



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MARC Train Service

The Maryland Transit Authority’s (MTA) MARC “Brunswick Line” is MARC’s longest line, providing commuter rail service from Martinsburg, WV to Washington, D.C.’s Union Station with three stops in West Virginia and fifteen stops in Maryland. The current service stops in West Virginia include Martinsburg, Duffields and Harpers Ferry. The Brunswick Line operates on CSX Transportation right-of-way, with 18 trains daily, including 6 trains (three in each direction) and two connecting buses that provide service to the West Virginia MARC stops, as shown in *Table 1* and *Figure 3*. The existing rail line also serves the CSX line (Cumberland Division) that holds the Amtrak Capitol Limited Line with service to Washington D.C., Pittsburgh, Cleveland and Chicago.

Table 1 – Current MARC Brunswick Line Schedule for WV Stops

Eastbound Schedule (Morning Service)			
Martinsburg	5:00	5:25	6:25
Duffields	5:16	5:41	6:41
Harpers Ferry	5:25	5:50	6:50

Westbound Schedule (Evening Service)					
Harpers Ferry	5:10*	6:05	7:18	7:54	9:00*
Duffields	5:25*	6:18	7:30	8:05	9:20*
Martinsburg	5:30*	6:39	7:50	8:25	9:25*

**Guaranteed dedicated connecting bus service to West Virginia*

Figure 3 – MARC Service Stops along the Brunswick Line (including proposed NorthPort Station Location)



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NorthPort Station

The City of Ranson has committed significant resources for the proposed relocation of the Duffields MARC stop to the Jefferson Orchards site. The proposed station at Jefferson Orchards has been referred to as “NorthPort Station.” The station is an important part of the region’s land development and transit access plans. It is expected to increase the visibility and accessibility of regional rail service and attract developers to Jefferson Orchards. The land at Jefferson Orchards has approved and vested plans for a mixed use development that orients around the future NorthPort Station multimodal facility. This development plan includes more intense mixed-use development around the station with residential neighborhoods and potential advanced manufacturing areas on the remainder of the roughly 400 acre parcel. The planned yield for the development is 872,000 square feet of commercial, office and retail development, 517 single family houses, 290 townhomes, and 248 multi-family units.

Expanding on the multimodal concepts planned for NorthPort, the commuter station will also serve as an EPTA bus transfer center that can be integrated with an enhanced bus route system to Martinsburg, Ranson, Charles Town and Harpers Ferry, as referenced in EPTA’s Transit Development Plan (TDP). The station will include bike and pedestrian facilities providing access to the neighborhood and to the regional bike path along Route 9.

The City of Ranson recognizes the importance of NorthPort Station in the planning and development of a sustainable, transit oriented development neighborhood at Jefferson Orchards. A Memorandum of Understanding (MOU) Agreement between the City of Ranson, Eastern Panhandle Transit Authority (EPTA), the West Virginia State Rail Authority (WV SRA) and the Jefferson Orchard property owners is being developed to specify roles and responsibilities for covering costs, structure for decision-making among the parties, and the confirmation of Jefferson Orchard’s intent to donate land for NorthPort Station. The agreements are included in Appendix C.

In addition, the NorthPort Station project has strong support from West Virginia’s congressional delegation and state legislators. Pursuant to direction from the federal Passenger Rail Investment and Improvement Act of 2008, the WV SRA conducted a comprehensive process to create a new *West Virginia State Rail Plan*, (see www.westvirginiarailplan.com/Home.aspx). The WV Rail Plan identifies NorthPort Station as a way to expand and improve passenger rail capacity in the West Virginia Eastern Panhandle and greater Baltimore-Washington regions (see the WV State Rail Plan pages 2-23, 2-65 and 5.7). Further, the West Virginia legislature overwhelmingly enacted a new “West Virginia Commuter Rail Access Act” in 2013, which provides the State with new authority to work with the MARC system to fund commuter rail facilities and service in West Virginia. The WV SRA passed a resolution supporting the relocation and signed an agreement with MARC, and CSX to relocate the MARC stop at Duffields to the NorthPort location. This has led the City of Ranson to proceed with this feasibility study that will be followed by the engineering and construction of the new station.

NorthPort Station Goals

- ✓ Provide enhanced accessibility to regional rail service
- ✓ Support transit oriented development at Jefferson Orchards
- ✓ Provide EPTA bus transfer center to improve multi-modal access
- ✓ Provide linkages to regional bike paths
- ✓ Replace Duffields MARC stop; Improved safety and amenities
- ✓ Attract developers to the region



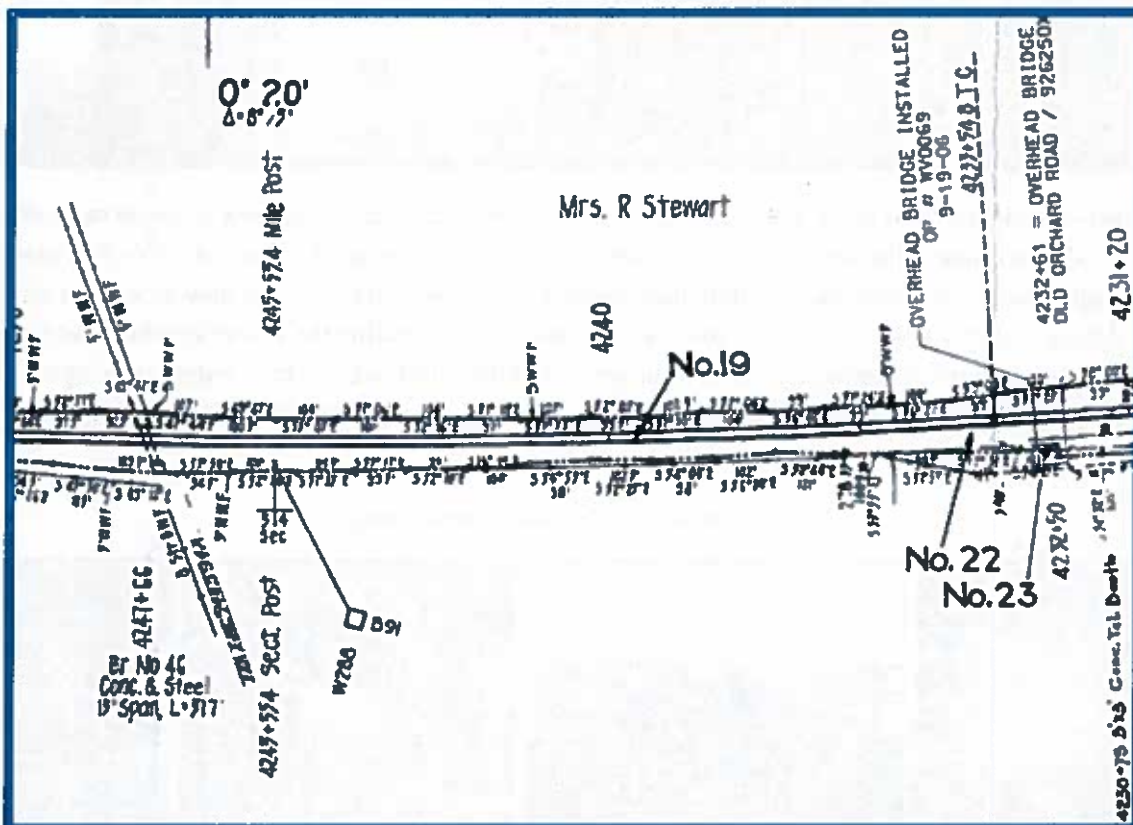
Initial Site Assessment

A site assessment was conducted for the Jefferson Orchards property and the existing Duffields MARC stop. The assessment and associated field visits focused on identifying key physical constraints that could affect the location of the NorthPort Station and design criteria for the station and its parking facilities. Other environmental issues are discussed in a separate section within this document.

Jefferson Orchards

The Jefferson Orchards property lies just north of the CSX railroad line and abuts the track for about 0.6 miles from just east of the NorthPort Bridge to the location where the track starts to turn further northward. Based on the Route 9 Right-of-Way (ROW) plans obtained from the West Virginia Department of Highway (WVDOH) and CSX valuation maps as shown in Figure 4, the Jefferson Orchards property boundary varies between 15-20 feet from the edge of the CSX track. The Jefferson Orchards site consists only of property on the northern side of the track. On the southern side of the track, the CSX ROW abuts WVDOH owned property.

Figure 4 – CSX Valuation Map Documenting CSX Right-of-Way



Several property features and structures were identified that impact the possible location of the station on the Jefferson Orchards property. These include an existing road tunnel under the CSX line, the NorthPort Bridge, and the elevation of CSX track along the property line. An assessment of CSX rail crossover locations was also conducted as it relates to the potential use of the property for industrial purposes.



CSX Tunnel: As illustrated in *Figure 5*, a CSX railroad tunnel currently exists approximately 0.3 miles west of the NorthPort Bridge. Initial discussions on station location concepts indicated the possible use of this tunnel for pedestrian access to a platform on the southern side of the CSX tracks. As part of the field assessment, a bridge engineer evaluated the tunnel to be structurally sound with sufficient clearance for use by pedestrians. Patch work and finishing would be required before pedestrian use, as well as the possible relocation or enclosure of existing utilities that currently run through the tunnel.

Figure 5 – CSX Rail Tunnel



Drainage was identified as a key issue in using the tunnel for pedestrian access to a separate rail station platform. As illustrated in *Figure 6*, the tunnel currently serves as a drainage structure for Route 9. A review of existing Route 9 drainage culverts and land elevation data indicate that the tunnel is at the lowest elevation point on the southern side of the CSX track. *Figure 7* illustrates the drainage flow direction within the tunnel vicinity. Water flows through the tunnel north onto the Jefferson Orchards property and then northwest. This creates some significant concerns regarding future runoff and the possibility of tunnel flooding. During the field visit, debris was observed at the southern tunnel opening.

Figure 6 – CSX Rail Tunnel Drainage



Use of the structure as a pedestrian tunnel would require additional alterations to the drainage facilities at this location. One option would include the boring of a new culvert under the track just west of the existing tunnel. This would require CSX approval, rework of the existing culvert outlet, and re-grading of the area. Such costs are estimated in the \$300,000-\$500,000 range.

Figure 7 – Area wide Drainage Flow Direction



A second alternative would be to add a drainage culvert under the existing tunnel base. This option would also require CSX approval and oversight to ensure that the existing tunnel footers are not impacted. The culvert would need to run a significant distance to reach a point of lower elevation on the Jefferson Orchards property. During stakeholder meetings for this feasibility study, both WVDOH and CSX expressed concerns about the possible use of the tunnel for pedestrian use due to the drainage issues provided above.

NorthPort Bridge: The NorthPort Bridge, illustrated in *Figure 8*, provides the primary access from Charles Town Road (WV 115) to the Jefferson Orchards property. The bridge currently has a pavement width of 30 feet with the following delineations:

- Two Travel lanes = 12 feet each
- Southbound shoulder = 5 feet
- Northbound shoulder = 1 foot

Figure 8 – NorthPort Bridge



The bridge would serve as the primary vehicle access to the NorthPort Station. The bridge would also provide pedestrian access from WV 115 and from the existing bike path which runs along the southern edge of Route 9 from Martinsburg to the Charles Town/Ranson area. Additionally, the bridge could support access to a station platform

on the southern side of the CSX tracks. This would require additional ramps and/or elevators as the bridge clearance is 24 feet above the track.

The bridge pavement width will not be sufficient for providing American Disabilities Act (ADA) compliant barrier protected crossings for pedestrians and/or bikes. However, the existing five foot shoulder would be sufficient for a striped dual use bike and pedestrian lane. Additional pedestrian access and/or ramps and elevators would need to be a separate structure or connected to the bridge piers.

CSX Track Elevation: Track elevation can have a significant impact on transit station and platform design and construction costs. Figure 9 illustrates the varying track elevation differences along the 0.3 mile stretch between the NorthPort Bridge and the existing CSX tunnel. At the tunnel location, the track's elevation difference is approximately 14 feet above the abutting ground. At this location, the construction of station platforms would require retaining walls. Tangent pile walls are one alternative, especially when there is limited ROW available. These consist of constructing drilled shafts to form a continuous wall. The costs associated with such walls and the associated ramps can be as high as two to three million dollars for a 400 foot platform.

Figure 9 – Track Elevation Differences at Jefferson Orchards



Elevation differences are at their lowest between 500-800 feet west of the NorthPort Bridge. At this location, the tracks are nearly at grade with the surrounding ground at Jefferson Orchards. This location would require less grading and ramps than other locations along the property. Elevation differences are at their highest just east of the NorthPort Bridge where the northern track land face is nearly 18 feet higher than the track.

CSX Track Crossovers: Current zoning for Jefferson Orchards allows for industrial uses on the western portion of the property. Potential industrial uses could incorporate a rail siding, which would need to be constructed in

coordination with CSX and their design specifications as provided in their “*Standard Specifications for The Design and Construction of Private Sidetracks*” manual.

Rail crossovers or double crossovers (e.g. interlocking) would be needed to allow trains to switch directions and to provide access to the rail siding. Currently, there are separate interlockings 1.7 miles southeast and 7.4 miles northwest of Jefferson Orchards. *Figure 10* illustrates the interlocking configuration of the one closest to Jefferson Orchards. Additional coordination with CSX would be required to evaluate the viability of a new rail siding. An existing siding for Ecolab Inc. is located 3.4 miles northeast of Jefferson Orchards, which can serve as an example.

Figure 10 – CSX Track Interlocking Southeast of Jefferson Orchards



Duffields MARC Stop

The Duffields MARC stop is located approximately 2.8 miles east of the Jefferson Orchards property. *Figure 11* illustrates some of the features of the current station. Stakeholders and rail authorities have identified inadequacies at the Duffields stop including the at-grade roadway crossing, inadequate parking, and the isolated location that poses security and safety issues. In addition, the land around the Duffields MARC stop is not zoned or suitable for transit-oriented development. The Duffields stop currently includes:

- 185 parking spaces
- Platform length = 200 feet, Platform width = 13 feet
- At-grade pedestrian crossing

The NorthPort Station would, at a minimum, need to include enough parking spaces to address the current demand at the Duffields location. Project stakeholders identified key station design criteria that should be enhanced for a new station. These include improved amenities including a possible station building, longer platform lengths, and separated grade crossings for pedestrians to ensure safety and to limit the potential for accidents and fatalities.

Figure 11 – Duffields MARC Stop





Station Location Options at Jefferson Orchards

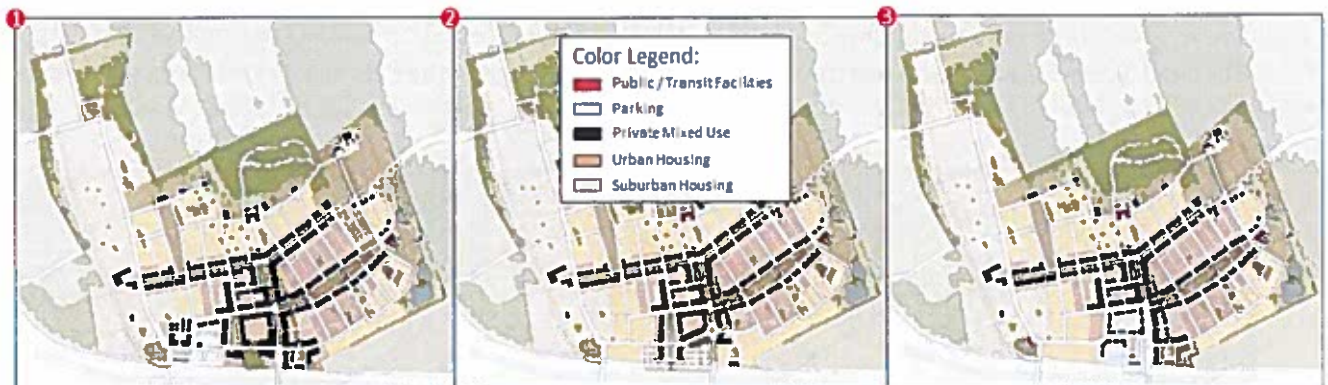
Based on the key physical structures and constraints provided above and future development characteristics and zoning, three potential options for the NorthPort Station location are identified in *Figure 12*. Station locations west of the existing CSX tunnel were not considered due to the configuration of the track (e.g. sight distance issues) and the potential use of that land for industrial uses or a potential rail access siding.

Figure 12 – NorthPort Station Location Options



Each of the options would not greatly change the overall development plans at Jefferson Orchards. The station locations would most likely just impact the parcels of land along the CSX station as shown in *Figure 13*. *Table 2* summarizes the strengths and weaknesses of each location for the NorthPort Station. These considerations were used by the Task Force to develop a preferred location for the conceptual station plan.

Figure 13 – NorthPort Station Location Integration to Development



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Table 2 – Strength and Weaknesses of NorthPort Station Location Options

Alternative Location	Strength	Weakness	Site Cost Issues
Option 1 Western End of Property Near CSX Tunnel	<ul style="list-style-type: none"> Existing tunnel available for pedestrian usage More flexibility for access road design Vicinity may be closer to alternative bus depot locations in industrial zoned areas 	<ul style="list-style-type: none"> Significant drainage issues to be addressed at the tunnel Fill and retaining walls needed on both side of the tracks due to track elevation Distance from roadway bridge and bike trail Longer bus access Village center and associated retail not near development access point May limit ability include a rail siding 	<ul style="list-style-type: none"> Tunnel Drainage = \$300,000 - \$500,000 Retaining Walls = \$2-3 million
Option 2 West of NorthPort Bridge	<ul style="list-style-type: none"> Station at grade with tracks, no major re-grading / retaining walls Location closest to core of villages, view of commercial from highway/roadway Closer access to RT 9 Bike Trail; Quick access for station access Buses not traveling through development 	<ul style="list-style-type: none"> Separate pedestrian (ADA) bridge needed to get to other side of tracks. Roadway design issues for turning busses (e.g. location close to roadway bridge) 	<ul style="list-style-type: none"> Pedestrian Bridges: \$1,500,000 – \$3,000,000 Ramps to platform (ADA accessible)
Option 3 East of NorthPort Bridge	<ul style="list-style-type: none"> Separates Park and Ride users from other development traffic. Allows for more bus parking options if this becomes a transfer point. Bus idling separated from rest of TOD development Closer access to Rt 9 Bike Trail Right in access off roadway (no waiting for left turn) 	<ul style="list-style-type: none"> Station not at village center Parking centric option that limits the retail/commercial potential Station at higher elevation of tracks which may require retaining walls 	<ul style="list-style-type: none"> Pedestrian Bridges: \$1,500,000 – \$3,000,000 Ramps to platform (ADA accessible)

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Environmental Screening Assessment

An Environmental Due Diligence screening was completed for the parcel being considered for acquisition and development. The Environmental Due Diligence Document does not fulfill requirements under the National Environmental Policy Act (NEPA) but rather is intended to highlight environmental subject areas most likely to require detailed study as project planning progresses. If and when the project does progress, the appropriate coordination must occur with the WV Division of Highways (DOH), the WV State Rail Authority (WV SRA), the Federal Highway Administration (FHWA), the Federal Railroad Administration (FRA), and other agencies as indicated throughout the Environmental Due Diligence Document. A summary of the Due Diligence findings is provided in *Table 3* and the full report is attached as Appendix B.

Table 3 – Summary of Due Diligence Findings

Environmental Subject Area	Recommendations for Additional Coordination or Analyses
Metropolitan Planning & Air Quality	N/A
Land Use & Zoning	N/A
Traffic	Impacts to all modes of traffic in the area will be investigated as part of the ongoing feasibility study being prepared for HEPMPO, and the findings will be incorporated into the project design. As planning and design progress beyond the scope of the feasibility study, a full Traffic Impact Study will be necessary. A preliminary scope for the Traffic Impact Study should be provided to WV DOH for review and concurrence, per DOH Traffic Engineering Directive 106-2 concerning access to/from DOH roadways.
Cultural Resources	Coordination with the WV SHPO is necessary in order to determine whether or not archaeological investigations are warranted. Also, if the multimodal facility work area encroaches on the nearby cemetery, then work must comply with state code and SHPO requirements. If any publicly or privately owned historic resources will be impacted by the project, then Section 4(f) requirements may apply.
Noise & Vibration	If federal funding is received, then noise and vibration impacts will need to be assessed per the Federal Transit Administration's <i>Transit Noise and Vibration Impact Assessment</i> manual.
Acquisitions & Relocations	Easements, coordination, and plan reviews by WV DOH, WV SRA, FHWA, FRA and other entities may be necessary for any work proposed outside of Jefferson Orchards' existing right-of-way.
Hazardous Materials	Due to the limited nature of the past screening effort, it is recommended that Phase I and Phase II Environmental Site Assessments be completed per American Society for Testing and Materials (ASTM) standards prior to property acquisition or development.
Community Involvement & Equity and Environmental Justice Analyses	Equity and environmental justice analyses should be completed to determine if the proposed project would result in disproportionately high or adverse impacts to minority or low-income populations present at either the NorthPort or the Duffields Stop locations.
Public Parkland & Recreation Areas	N/A
Wetlands	A qualified wetland professional should conduct an onsite wetland survey to confirm the absence of wetlands with the project area.
Floodplains	N/A
Water Quality & Navigable Waterways	If the CSX rail tunnel is utilized as a pedestrian underpass (Option 1), then impacts to site drainage will need to be investigated. Any proposals to modify the existing drainage system or to utilize the existing drainage structure for pedestrian access would need to be



Environmental Subject Area	Recommendations for Additional Coordination or Analyses
	vetted by the WV DOH and the FHWA. Regardless of what is proposed, the WV DOH will need to review the drainage layout and calculations to verify the level of impact on the State Highway System. Potential short-term and long-term surface and ground water quality impacts caused by implementation of the proposed project should be mitigated with the use of Best Management Practices, an Erosion and Sediment Pollution Control Plan, and/or a NPDES permit, according to all relevant standards and guidelines.
Endangered Species & Ecologically-Sensitive Areas	Further consultation with the USFWS is required under section 7 of the Endangered Species Act of 1973, as amended.
Safety & Security	N/A
Construction	N/A

- No Concerns or Further Coordination/Analyses Identified
- Additional Coordination or Analyses Warranted
- Potential Concern Identified





MARC Station Lot Survey and Parking Demand

A MARC station survey was conducted to provide insights on the usage characteristics of the area's transit parking lots and to identify the potential level of support for a new transit station at Jefferson Orchards. The survey was conducted mid-week on February 11, 2015 by leaving postcards on vehicles parked at the Martinsburg, Duffields, Harpers Ferry and Brunswick MARC stops. A total of 550 postcards were distributed. In addition, flyers were posted around the station that provided smart phone scans to the survey. *Figure 14* displays the postcard survey.

Figure 14 – NorthPort Station / MARC Post Card Survey

MARC Station Lot Survey





Provide Your Responses on Back and Drop in Mailbox
OR
Take This Survey Online
<http://goo.gl/WLWwGX>



Smartphone Use Only

For Additional Information visit www.hepmo.net/Northport



The Hagerstown / Eastern Panhandle Metropolitan Planning Organization would like your assistance in understanding the usage characteristics of the area's transit parking lots and if you would support the relocation of the current Duffields station to a new location with additional amenities near the Wiltshire Road Exit off Route 9 in Ranson, WV.

Check Parking Lot Location: Duffields Martinsburg Harpers Ferry Brunswick

Where do you live? (zip code or city): _____

Where is your Destination? (zip code or city): _____

Mode of travel from lot to destination: MARC AMTRAK Carpool

Purpose of your trip: Work Shop Other

How often do you use this lot on an average week? 1-2 times 3-4 times 5+ times rarely

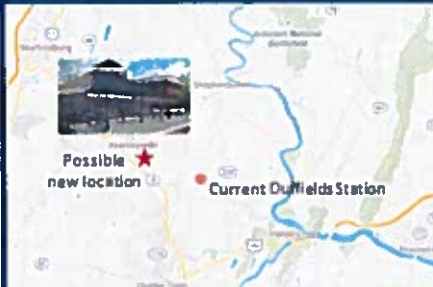
Would you use the relocated Duffields Station with easy access to Route 9 and new amenities? (See map to right on potential location) Yes No

Additional Comment on proposed lot relocation: _____

Postage Here

Michael Baker INTERNATIONAL

Michael Baker International
1304 Concourse Drive, Suite 200
Linthicum MD 21090



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Michael Baker INTERNATIONAL

NorthPort Station Feasibility Study

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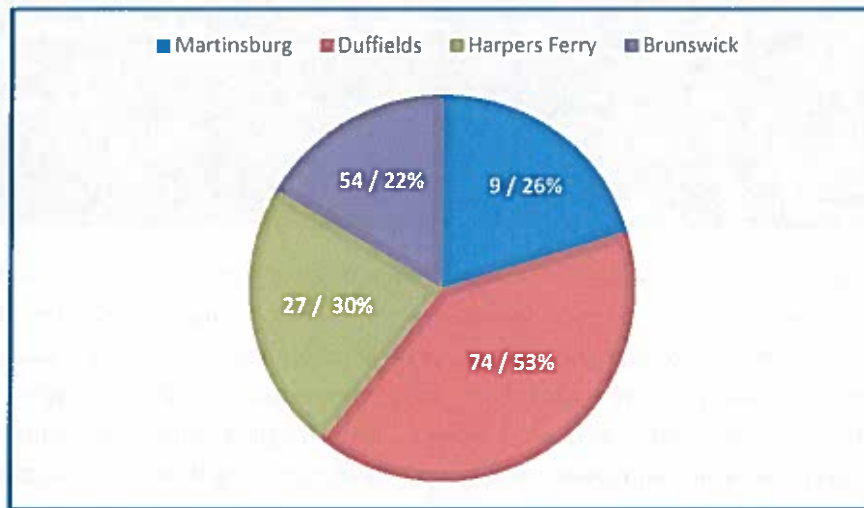
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The survey produced 164 responses, approximately thirty percent of the distributed postcards, with twenty-five percent of the responses completed on-line. The actual number of responses and percentages by station are shown in *Figure 15*. A summary of the postcard distribution is as follows:

- Brunswick – 250 post cards, the largest parking lot utilized by commuters from Maryland, Virginia and West Virginia, but only issued to vehicles with West Virginia and Virginia license plates,
- Duffields – 140 post cards, estimated 185 parking spaces that were 75 percent utilized,
- Harpers Ferry – 90 post cards, estimated 95 parking spaces that were 95 percent utilized, and
- Martinsburg – 34 post cards, estimated 68 parking spaces that were 50 percent utilized.

Figure 15 – Number and Response Rate of the Survey by Station



The survey included the following question: “Would you use the relocated Duffields stop with easy access to Route 9 and other amenities?” This information, along with the existing spaces and utilization at each lot, supported the estimation of parking demand and ridership for the NorthPort Station. A total 46 percent of the responders stated they would utilize the NorthPort Station. *Figure 16* provides the number of NorthPort responses by station. *Figure 17* shows the home locations on a Google Earth map for those responding “Yes” and “No” to the question.

Figure 16 – Usage of the NorthPort Station Responses by Station

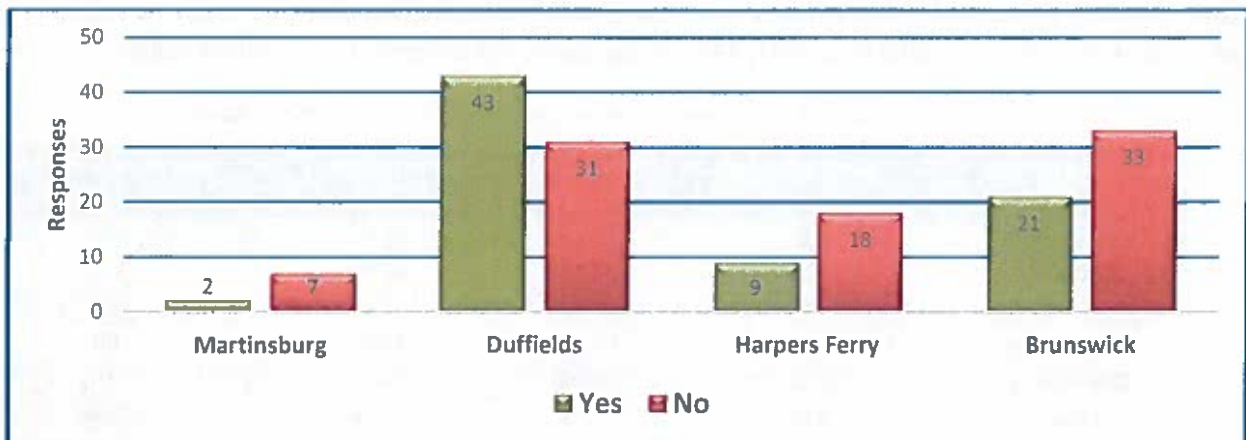
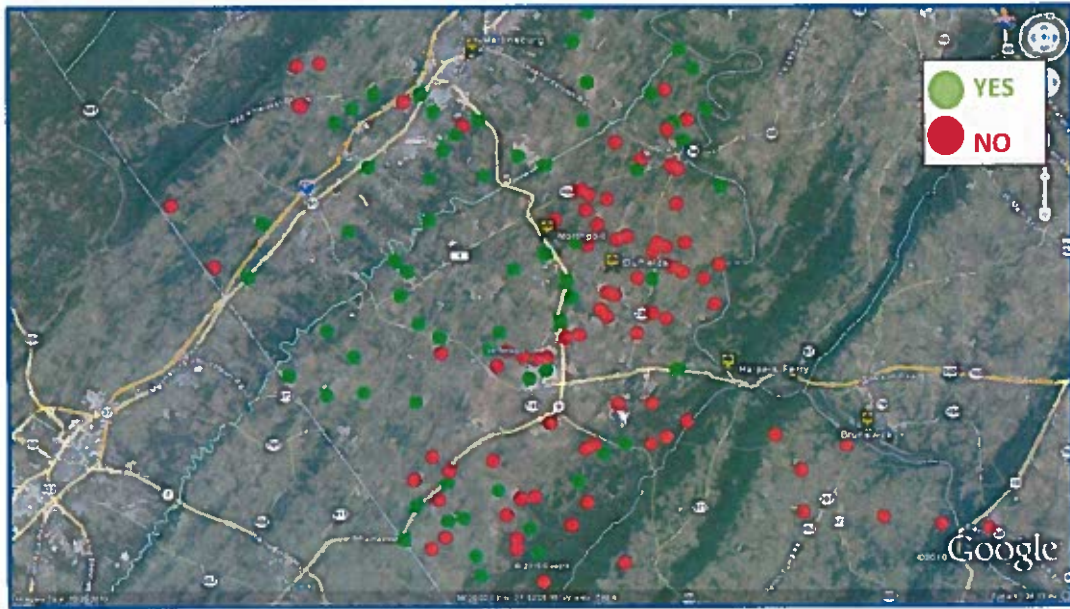




Figure 17 – Commuter Origin Locations with NorthPort Usage Responses



The survey provided a number of insights into the commuting patterns of the local residents (in Jefferson and Berkeley Counties) using MARC. In general, convenience, time and costs are driving factors for commuter decisions. The commuters living west of Route 9, east of I-81, near Shepherdstown, and those south of Charles Town that access Route 9 would generally switch to NorthPort. Those who would not utilize NorthPort provided comments of convenience to their existing station or cost increases. West Virginia commuters using Brunswick commented increased MARC service schedule and lower costs as reasons for not using West Virginia stations. Other trends from the survey include:

- The main commuter destination is Washington, D.C.
- MARC is the primary mode of travel, and only a few use Amtrak
- The overwhelming purpose of the commuter trip is for work
- 60 percent of commuters use MARC 5 days a week and 90 percent use MARC at least 3 days a week

The NorthPort Station parking demand was estimated based on observed lot utilization and survey responses related to the potential usage of the NorthPort station. The diversion from Duffields to NorthPort was increased to 80% (over the survey value of 60%) to ensure a more conservative estimate for parking demand. As shown in Table 4, in the short term it is projected that nearly 230 parking spaces will be needed at NorthPort station.

Table 4 – Estimated Number of Parking Spaces Needed for NorthPort Station

Station	Number of Parking Spaces	Percent Utilized	NorthPort Percentage	Number of Parking Spaces at NorthPort
Martinsburg	68	50%	20%	7
Duffields	185	75%	80%	112
Harpers Ferry	90	95%	33%	30
Brunswick	200 (WV users)	100%	40%	80
Brunswick	50 (VA users)	100%	0%	0
Totals	~600	~85%	~55%	~230

Preferred Location for NorthPort Station

This feasibility study has identified a preferred location, *Figure 18*, for the NorthPort Station to guide development of a more detailed site plan, station characteristics and costs. The project Task Force reviewed key aspects of the site assessment and property features to determine the preferred location. The selected site was based on the following criteria:

- Adequate sight distance
- Minimal elevation difference with CSX track
- Most flexibility for design and integration with other development at Jefferson Orchards
- Concerns over the use of the tunnel for pedestrian usage due to drainage issues
- Distance from zoned industrial usage and a possible rail siding
- Distance from NorthPort Bridge allowing for future bridge expansion without direct impact on the station or pedestrian bridge

Figure 18 – Preferred NorthPort Station Location on Jefferson Orchards Property



NorthPort Station Area Development

Building upon the identified preferred station location, the planning team established a list of parameters to be used in developing an overall station area site plan and specific station design elements. These parameters were identified through a review of similar stations, both regionally and nationally, and through objective data analysis designed to identify the realistic needs for the station area based on anticipated utilization and future land uses. In addition, input from the NorthPort Station Task Force (including WV SRA, MARC and CSX) was solicited through an in-person meeting in Ranson. At this meeting, sample stations that used different design elements were shown and discussed with the group and preferences were noted by the planning team. In the end, the following base parameters were used in the development of the station area site plan and specific station design elements:

- Minimum of 230 parking spaces in initial phase
- Integrated bus transfer facility
- Phased approach to integrate with future Transit Oriented Development (TOD)
- Station building between 500 and 1000 square feet for light retail and/or institutional use
- Fully ADA accessible station
- 400-ft low level platforms
- Independent pedestrian overpass for vertical circulation
- Short platform canopies for passenger comfort and winter maintenance
- Station design style that fits into the area's historical character
- Bike and pedestrian connections to the Route 9 bike path

Using the parameters developed in collaboration with the task force, the planning team underwent an iterative conceptual design phase to illustrate and document potential station area site plans and specific design elements for the future NorthPort Station. The station was designed to be cost-conscious, while having the ability to be integrated into a future mixed-use development but with independent utility in the interim.

Site Plan

Site plans for the NorthPort Station were developed to illustrate proposed roadway access to the station, vehicle parking, abutting buildings, pedestrian/bike facilities and the station building and platform structures. As illustrated in *Figure 19-21* (full page size diagrams are included in Appendix A), the site plans were developed in multiple phases. The area of the multi-modal center, station and parking lot encompass about 6.1 acres of land. With the access roads and roundabout, the area is just over 8.5 acres. Appendix H illustrates the area calculations for different components of the site plan.

Phase 1: The initial phase focuses on the construction of the station, parking lots and roadway access from the NorthPort Bridge. The station is located approximately 650 feet west of the bridge adjacent to the existing train tracks. NorthPort Road will serve as the main access point to the station area. The construction of the roadways will include four lanes with a traffic roundabout. The roundabout is designed to support the turning of autos and large vehicles, such as busses and hauling trucks. The roads have been designed according to the initial conceptual plans provided in the comprehensive plan; however, Phase 1 does not include any expansion of the NorthPort Bridge which currently has two travel lanes. In the short term, a 5-foot dual pedestrian/bike path can be marked on the western side of the bridge. However, to ensure limited conflicts with pedestrians, bikers should be required to walk

their bikes across the bridge. If the bridge were to be expanded in the future, enhanced pedestrian and bike accommodations can be made to increase safety.

Figure 19 – NorthPort Phase 1 Site Plan



Planned as a multi-modal station area, the NorthPort Station will accommodate and provide access to commuter rail transit, bicyclists, local bus riders, automobile users, and local pedestrians. In addition, the station site provides a civic plaza and space for additional TOD as identified in the Jefferson Orchards land development plan. The station building and platforms are located on the tracks and fronts onto a bus transfer plaza perpendicular to the tracks and station platform. The station building may be used for a variety of purposes over both the short and long-term development. A separate pedestrian bridge will provide access between platforms at the station area. The elevator towers on the platforms are designed to be focal points that provide a wayfinding structure for travelers to the station. The bus transfer plaza has kiss & ride drop off points, handicap parking, ticketing facilities, and a civic space. The area has been designed to provide adequate turning radii for buses and to include locations for bus parking. A large parking area is located between the station platform and NorthPort Road. The lots include over 300 parking spaces to accommodate those who had used the Duffields stop plus additional diversions from other regional stations.

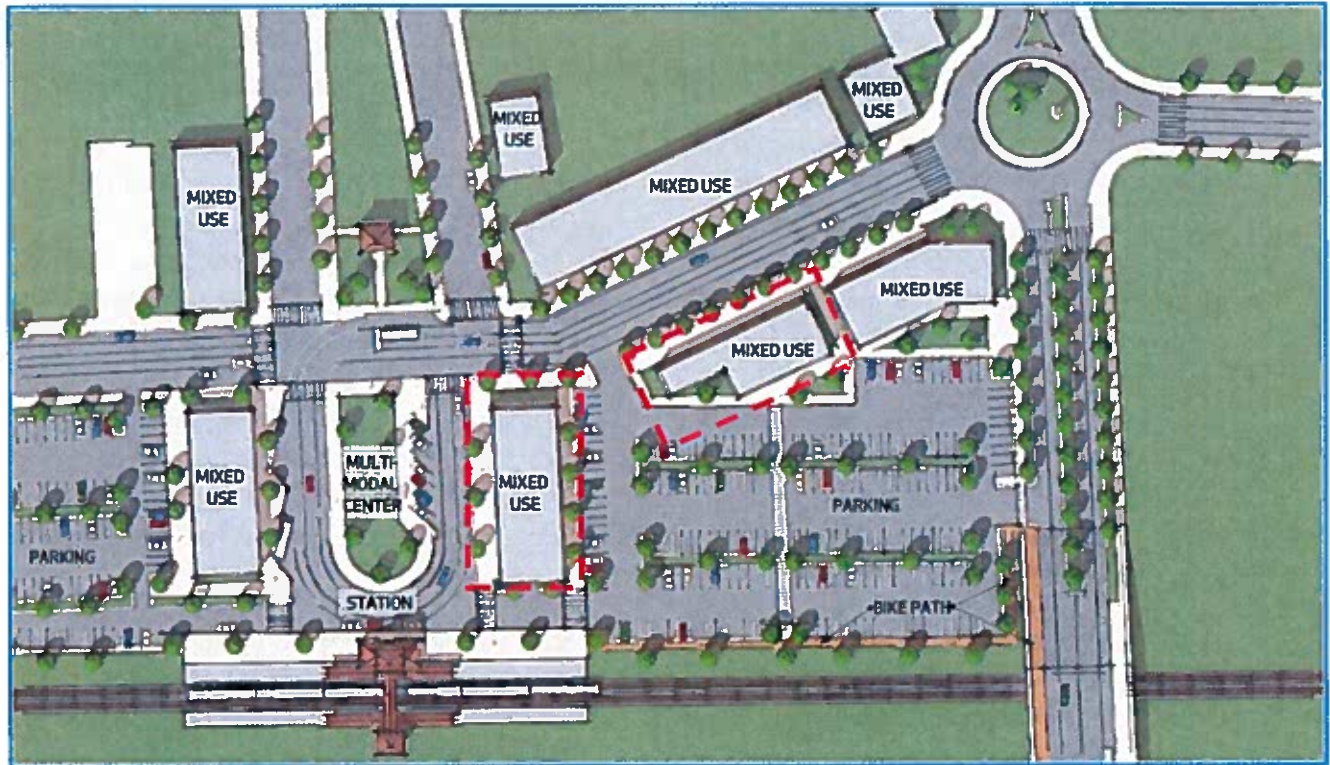
Phase 2-3: Additional phases illustrate potential future development near the NorthPort Station site. As illustrated in Figure 20, commercial buildings and a “town square” are planned to front onto the local streets and transit plaza in later phases of the development. Future buildings west of the plaza are located in the zoned special business district which allows for a wider variety of uses. Phase 3 of the plan illustrates the possible conversion of parking spaces into additional mixed use buildings.



Figure 20 – NorthPort Phase 2 Site Plan



Figure 21 – NorthPort Phase 3 Site Plan

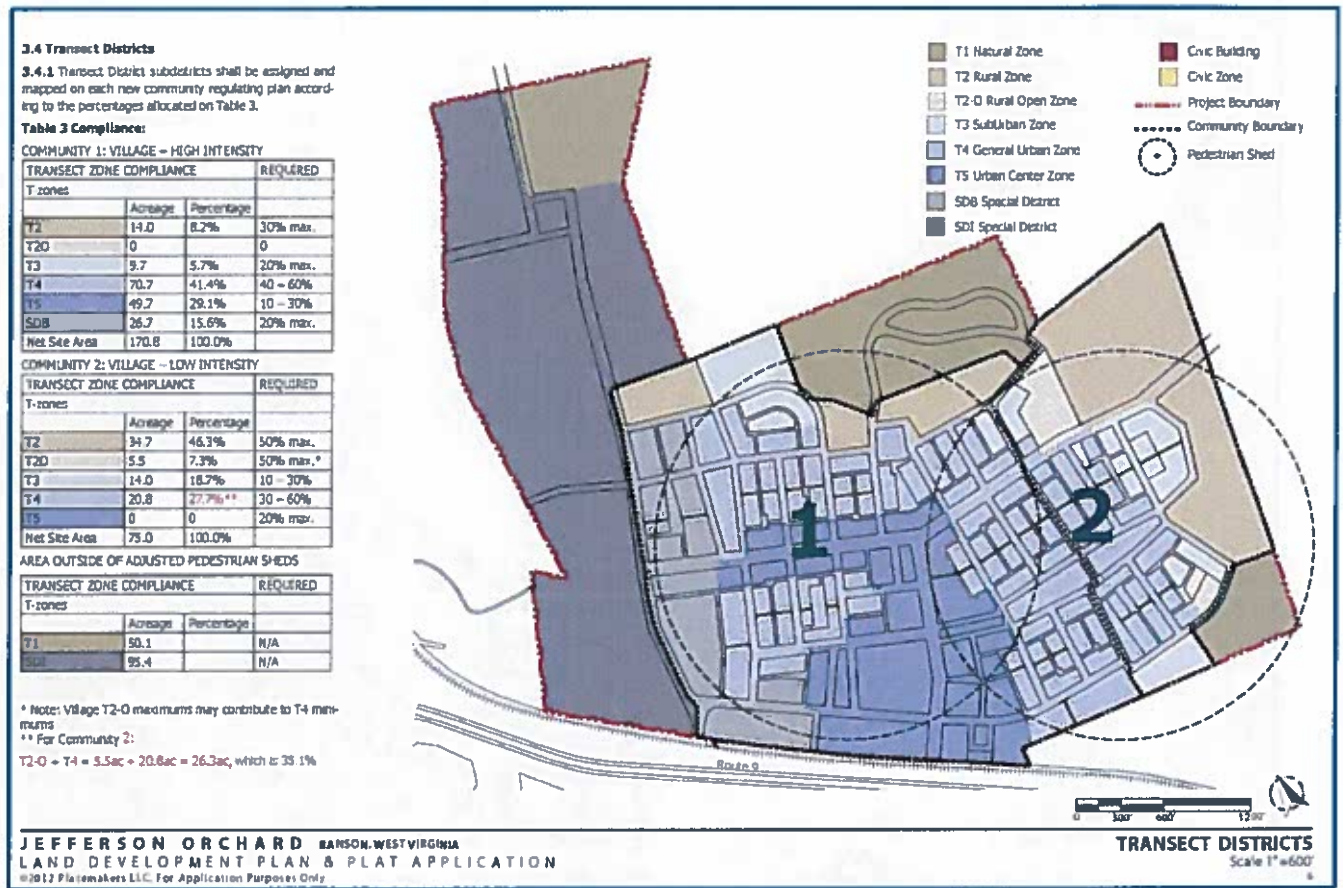




Station Integration with Jefferson Orchards Development

The NorthPort Station location is consistent with recent zoning districts established by the City of Ranson. The planning process started in 2012 with the city’s Comprehensive Plan and Zoning Ordinance updates, which included the identification of Jefferson Orchards as a site that could be used to demonstrate “SmartCode” regulations to promote traditional-neighborhood, mixed-use, and green-focused development. Figure 22 illustrates the land development plan for the Jefferson Orchards property. This plan allows for a Village, Town Center or Transit Oriented development (TOD). Within the Comprehensive Plan, the proposed relocation of the Duffields MARC Stop to Jefferson Orchards is included as an important step to establishing a TOD.

Figure 22 – Jefferson Orchards Land Development Plan



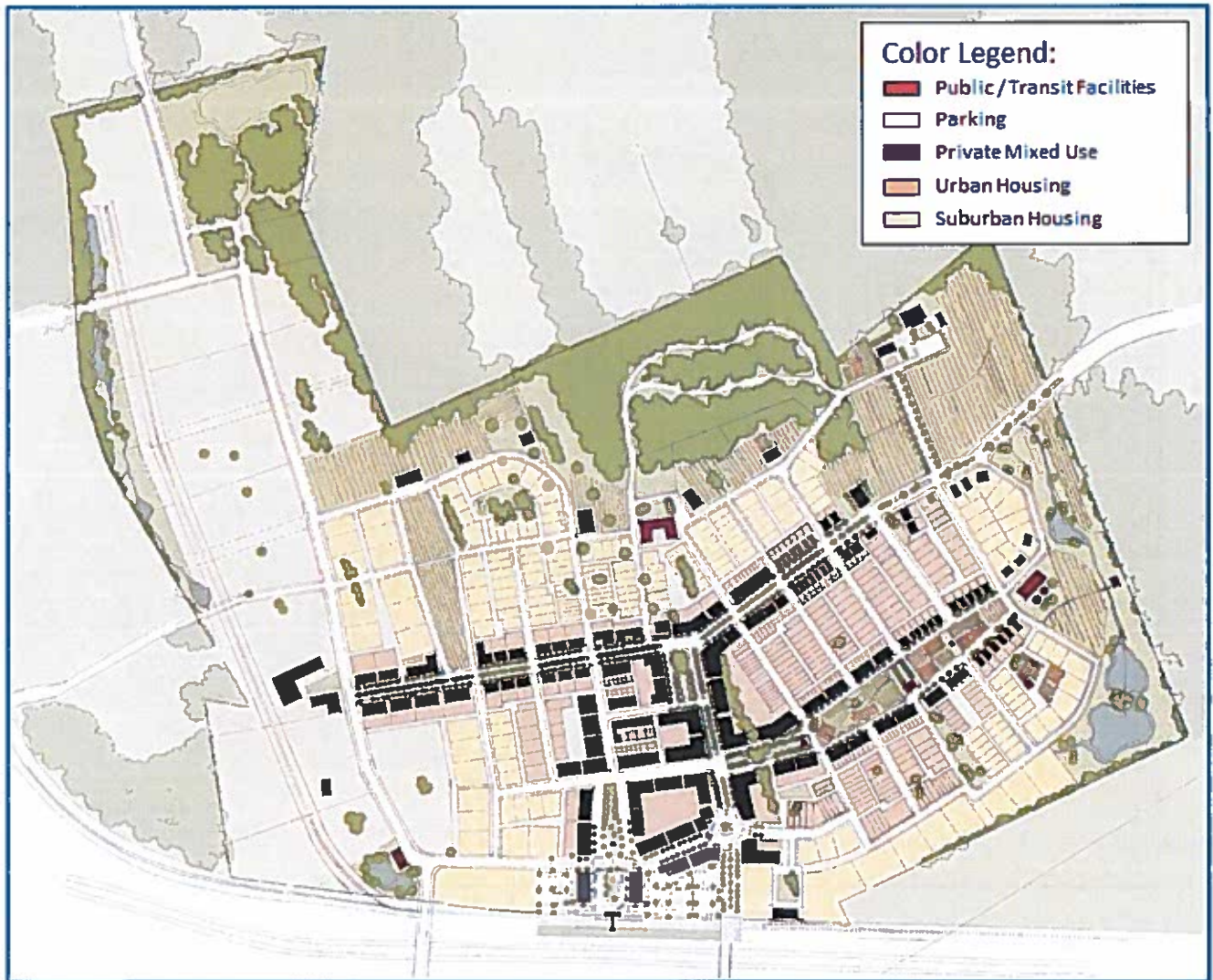
Within the land development plan, the community unit types include two “Villages” with five defined transect zoning districts and special industrial and business districts. A major feature of transect zoning is that it incorporates a variety of residential and commercial spaces into a single neighborhood. The thoroughfares have high street connectivity defined mainly by a commercial street type with on-street parking (both parallel and angled). Other key characteristics of the development include small blocks with wide sidewalks, street landscaping and pedestrian-scaled lighting.

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The preferred NorthPort Station location is specially located in the "High Intensity" village community unit type and facilitates ease-of access and supports future urban village development. The station satisfies zoning standards for the "T5-Urban Center Zoning District" including the block perimeter and civic space requirements. *Figure 23* illustrates how the proposed station site integrates with the remaining development at Jefferson Orchards. The figure is consistent with the TOD illustrative plan included in the 2012 City Comprehensive Plan, with the only change being the revised location for the NorthPort station.

Figure 23 – NorthPort Integration with Jefferson Orchards Development



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Station Design Elements

As part of the planning process, conceptual designs were developed for the future NorthPort Station. These planning level designs were based on similar stations throughout the country, with particular focus paid to other MARC stations and other Mid-Atlantic and Northeast commuter rail stations. A visualization of the site and station location is shown in *Figure 24*. Details regarding specific station design elements are identified below.

Figure 24 – NorthPort Station and Site Visualization



Core Station Design Elements

Core station design elements consist of the principle components of a functional station. These design elements represent the largest costs associated with the construction of the new NorthPort Station.

Station Building

The proposed concept for the NorthPort station incorporates a stand-alone station building of approximately 1,100 square feet under roof. The station building is integrated with the pedestrian towers discussed below, and as such not all 1,100 square feet will be usable space. With the incorporation of the tower, approximately 900-1,000 square feet will be available for light retail, institutional, or commercial use.

The station building should include a small seated waiting area for passengers, passenger restrooms, a MARC and EPTA ticketing kiosk (preferable electronic rather than staffed), and a small office and/or retail area. Retail uses may include a news/refreshments area for train commuters, or a specialty retail shop that may draw additional patronage outside of the MARC commuters.

Station buildings are becoming less common at commuter rail stations given their expense to operate and maintain. It will be critical to the success of the NorthPort Station that tenants be secured prior to the opening of the station. While the community may decide the space is best used for government or institutional use, such as office space for



the Eastern Panhandle Transit Authority (EPTA), lease agreements should be structured to ensure that the tenants are responsible for a large portion of the operations and maintenance cost of the station building itself.

The concept design developed could be implemented without the station building component initially. After that construction of the station, the building could be added on at a later date once activity in the surrounding development begins to take shape.

Pedestrian Overpass and Towers

The biggest issue at commuter rail stations throughout the U.S., including at the current Duffields stop, is a lack of a grade-separated ADA-compliant path between platforms. During the development of the conceptual feasibility plans for NorthPort station, multiple options were considered for a path between platforms including:

- Existing railroad underpass
- New tunnel under the existing rail bed
- Utilizing the existing NorthPort Avenue bridge
- New, independent pedestrian overpass

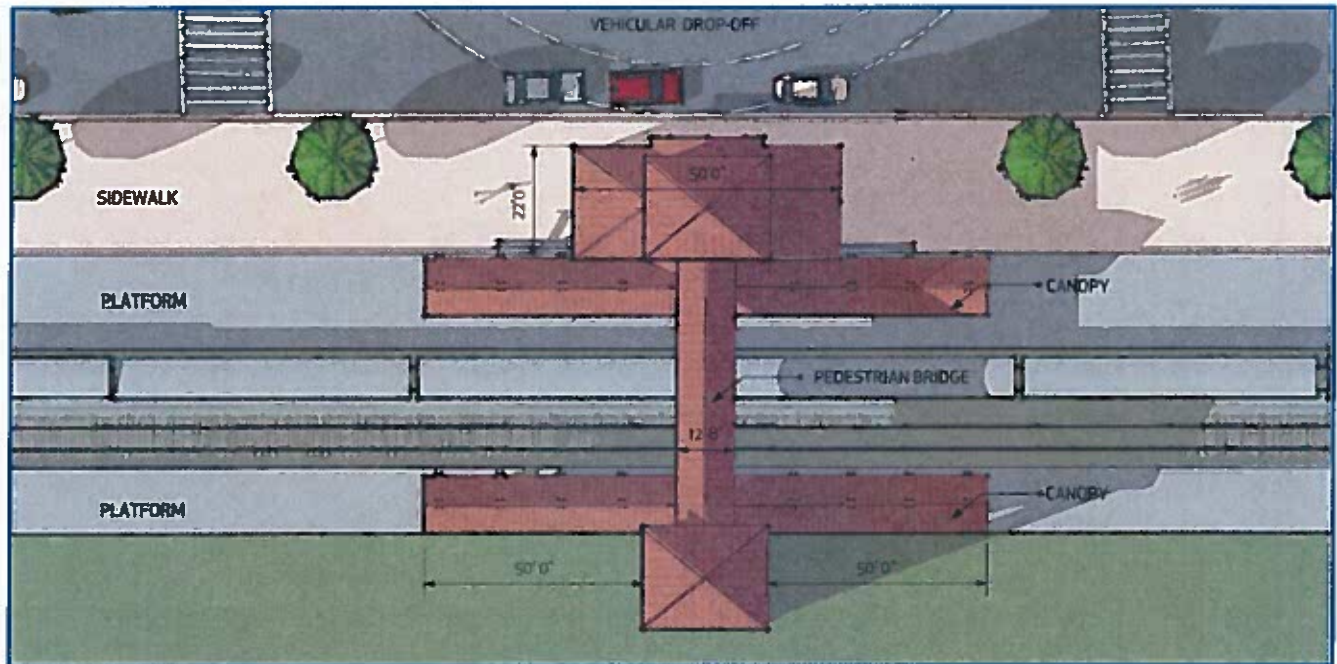
After vetting all options in coordination with MARC and CSX, the project team and the NorthPort Station Task Force identified a new, independent pedestrian overpass as the best option for the new NorthPort station. The existing tunnel is too far from the preferred location to be a viable alternative, and a new tunnel was determined to be cost-prohibitive at the preferred location. In addition, utilizing the existing NorthPort Avenue Bridge was determined to be infeasible given the unknowns associated with future expansion to four lanes and the potential for future direct connections between NorthPort Avenue and Route 9. Pedestrian overpasses are becoming commonplace around the country, and can be prefabricated to facilitate quick construction.

The pedestrian overpass is designed as a covered open-truss steel bridge. The conceptual design includes an overpass that is 12'8" wide and approximately 60 feet in length. To comply with CSX clearance requirements, the lowest point on the overpass should be no less than 23 feet from the top of rail. To save on construction costs and future operations and maintenance costs, the overpass is not anticipated to be climate-controlled, but must be enclosed to a level in which passengers cannot drop items onto the CSX railroad tracks.

Two pedestrian towers will access the pedestrian overpass, with both stairs and elevators. The towers represent the most significant architectural feature of the station, and may serve as prominent landmarks for the future development. The pedestrian towers are designed to be enclosed to protect from the elements. In future engineering phases, consideration should be given as to whether the towers should be climate controlled based on capital costs at the time of design, anticipated operations and maintenance costs, and ownership and maintenance requirements. An aerial view of the proposed station building and pedestrian towers are illustrated in *Figure 25*.



Figure 25 – Aerial View of the Station Building and Pedestrian Bridge



Crashwalls

Crashwalls are protective barriers designed to guard overhead support structures (i.e., bridge piers) from damage resulting from train crashes. Requirements for crashwalls are laid out in specifications provided by the American Railway Engineering and Maintenance-of-Way Association (AREMA) whenever the face of a bridge pier is closer than 25'-0" from the centerline of the nearest track. Crashwalls must be a minimum of 2'-6" thick, extend a minimum of 6'-0" from the top of high rail, and extend a minimum of 6'-0" beyond the column on each side. The requirements of crashwalls make them expensive to construct, and it is in the best interest of station owners to construct in a way that avoids the need for crashwalls wherever possible.

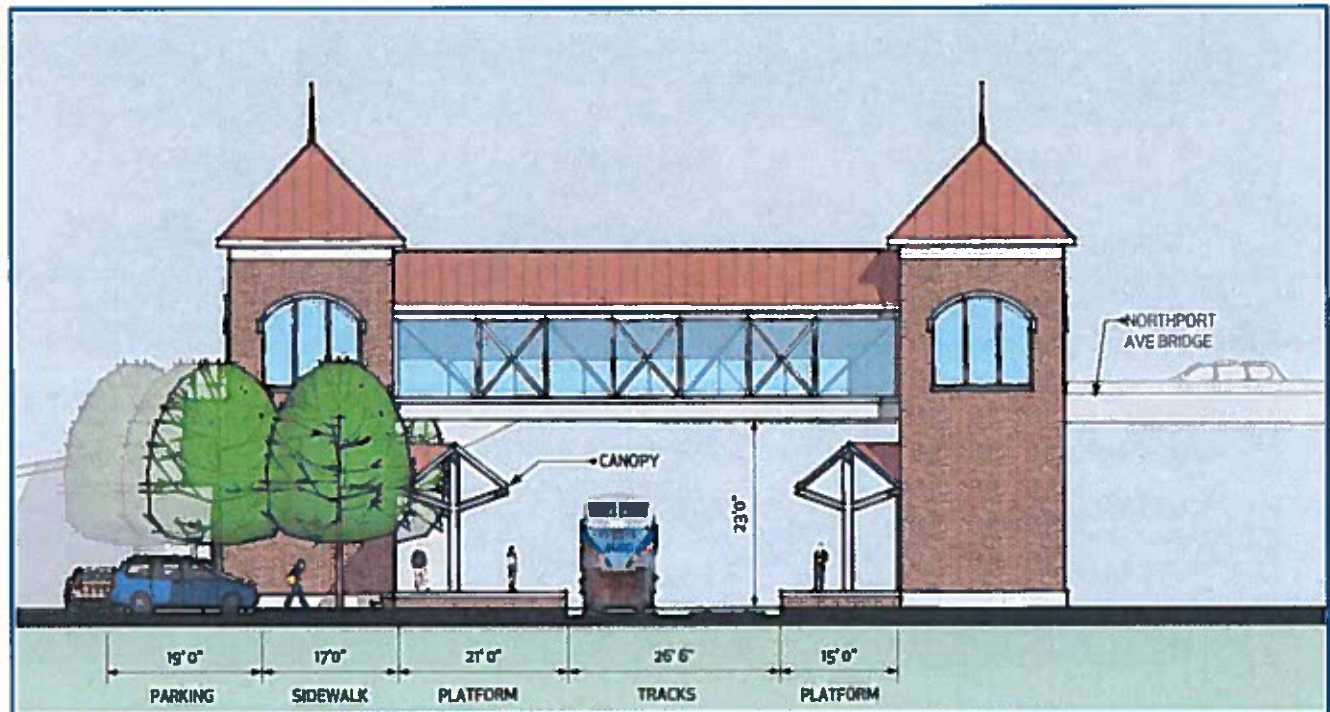
For the purpose of the NorthPort Station conceptual design, the northern pedestrian tower (left on the site section in Figure 26) was placed outside of the CSX right-of-way and beyond the 25'-0" requirement for crashwalls. Due to the presence of Route 9 right of way immediately adjacent to the southern pedestrian tower, it may not be possible to locate outside of the 25'-0" requirement for a crashwall.

For the purpose of the development of planning-level capital cost estimates, it has been assumed that one crashwall will be needed. However, it is clearly preferred that the south pedestrian stair tower be located outside of the 25'-0" boundary if discovered possible during the design phase.





Figure 26 – NorthPort Station Conceptual Design of the Pedestrian Bridge and Canopies



Platforms and Canopies

To meet the needs of the current MARC service, two new platforms will be constructed on either side of the existing CSX tracks. The platforms will be a minimum of 400 feet long, fully ADA compliant, and low-level to accommodate the current MARC Train and any potential future train connections (i.e., Amtrak Capitol Limited service). The width of the platforms should be 12 to 15 feet wide. For the northern platform (outbound), the platform was conceptually designed to be approximately 21 feet wide to allow for the stair tower and station building to be fully outside of existing CSX right-of-way. An alternative design would allow for 15 feet platforms but include sidewalks to connect the station building area to the platforms.

Platform canopies are proposed to reduce maintenance costs and provide shelter for the elements for train passengers. Given the high cost of canopies, the conceptual design includes 100 linear feet of canopy, with 50 feet on either side of the pedestrian overpass. This concept was developed to minimize construction costs while retaining the convenience and comfort of canopies.



Capital Program Elements

Using the conceptual designs developed for the NorthPort Station, the planning team identified planning-level cost estimates of broad capital program elements to assist in the development of a strategic funding and implementation plan. The cost estimates relate to the Phase 1 Site Plan presented in previous sections. The estimates were derived from historical construction costs for similar stations, as well as an assumed price escalation factor to current day dollars. A cost range (low, high) is provided to account for the variability in construction costs between market areas. In addition, a project contingency fund is included to account for uncertainties in the actual design and construction phase of the project. Overall, the total construction cost of the new NorthPort Station and associated infrastructure improvements necessary to construct the station is between approximately \$11 and \$14 million as shown in *Table 4*.

Table 5 – Estimated Costs for NorthPort Station

Capital Program Element	Low Estimate	High Estimate
Access Roads (See Appendix G for additional detail)	\$3,200,000	\$3,600,000
Platforms	\$1,600,000	\$2,300,000
Pedestrian Towers and Bridge	\$1,500,000	\$2,000,000
Crash wall	\$400,000	\$500,000
Station Building	\$250,000	\$350,000
Canopies	\$600,000	\$800,000
Parking lot	\$850,000	\$1,250,000
Utilities (10% est.)	\$840,000	\$1,080,000
Site Preparation and Miscellaneous	\$840,000	\$1,080,000
Subtotal	\$10,080,000	\$12,960,000
Project Contingency (10%)	\$1,008,000	\$1,296,000
TOTAL	\$11,088,000	\$14,256,000

In addition to the actual construction costs associated with NorthPort Station, significant investment will be needed for engineering and environmental clearance prior to initiating construction. Generally, total engineering and environmental should be between 10% and 20% of the total project cost, dependent upon challenges identified later in the process. For the purpose of this project, it can be assumed that the total cost for engineering will be approximately \$1.5 to \$2.0 million.



NorthPort Station Ridership Assessment

The NorthPort Station is expected to be an important passenger rail and transit bus hub to serve the growing Eastern Panhandle region and to support future transit oriented development at the Jefferson Orchards site. The station will replace the existing Duffields MARC stop, providing enhanced access off Route 9 and improved amenities. In the short term, the station will serve many of the current users of the Duffields stop and additional diverted riders from nearby stations including Martinsburg, Harpers Ferry, and Brunswick as estimated from the surveys conducted for this study.

Continued housing development in the Ranson and Charles Town region will support future growth in transit and rail ridership. With a large number of Jefferson County residents working in other states, the NorthPort station is expected to provide a key multimodal transportation alternative for the region's residents. In addition, other multimodal access needs may result from anticipated commercial development, including at the Potomac Entertainment District just south of the Jefferson Orchards site in Ranson. Longer term development at Jefferson Orchards, including residential, office, industrial and/or commercial development, will result in future transit ridership growth at the station.

Integration of EPTA and Amtrak Service

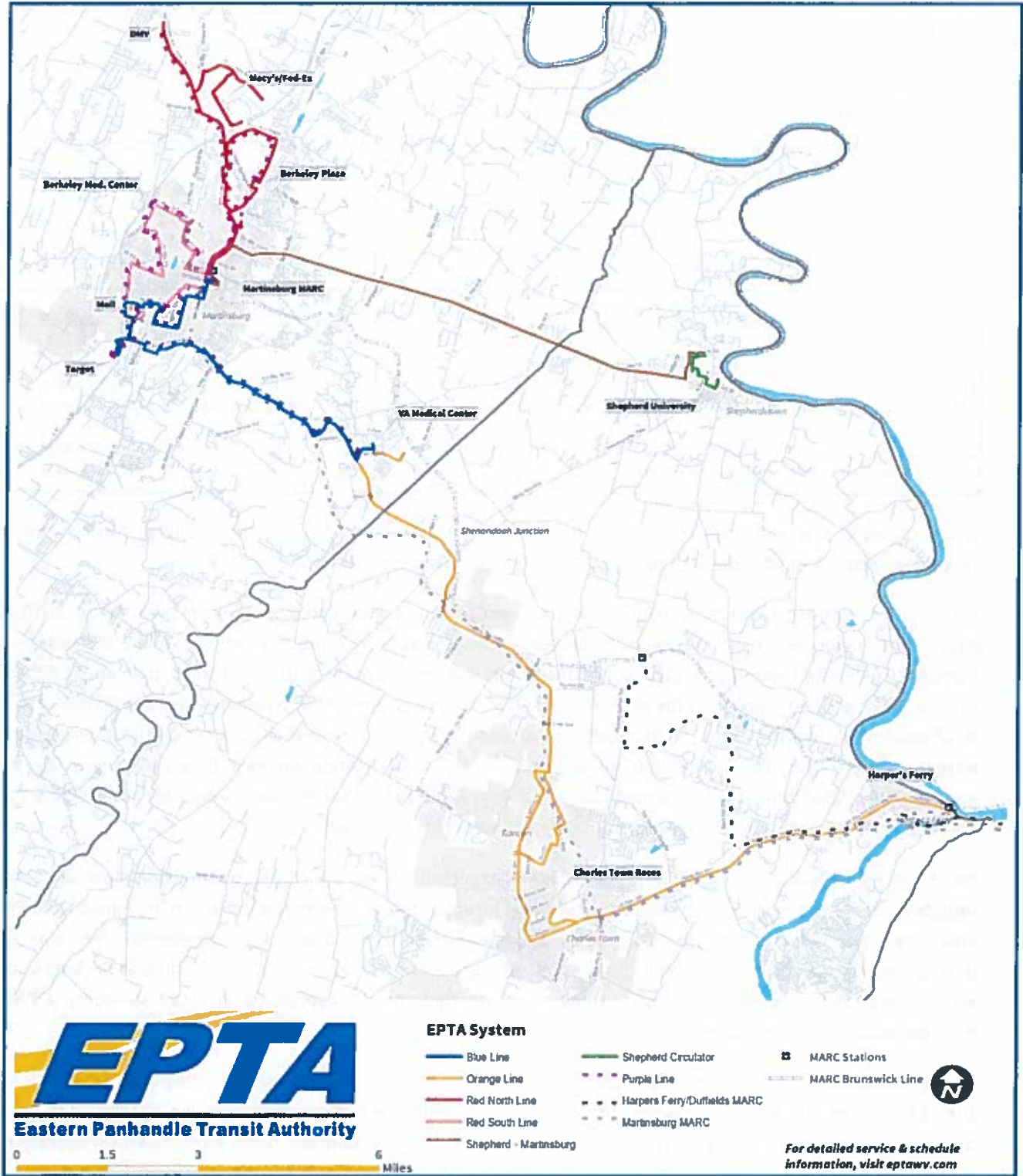
The NorthPort station is expected to serve as a transit bus hub and has been designed to include bus bays to support passenger transfers. As plans for the station progress, it will be important for EPTA to coordinate their services with the station. Initially, the Orange Line (Figure 27) could be diverted to serve the site, and Orange Circulator trips could be extended to provide all day service. Eventually, as development continues, additional connections to the site from Martinsburg, Shepherdstown, and Charles Town should be considered, along with a neighborhood circulator that would connect residential areas to the station. Further integration of EPTA transit routes, staff offices and bus storage facilities at Jefferson Orchards may elevate the importance of the station to regional transit operations.

To further support future development and regional access, local authorities may work with Amtrak to identify opportunities to provide service at NorthPort. Amtrak service to the site may provide additional future multi-modal alternatives for residents and commercial areas in Ranson and Charles Town. In Fiscal Year 2013, Amtrak had over 9,300 passengers getting on or off at the Martinsburg station, and over 6,200 on/off passengers at Harpers Ferry.¹

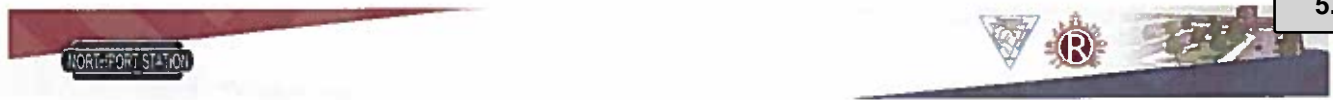
¹ <http://www.amtrak.com/ccurl/730/658/FY13-Record-Ridership-ATK-13-122.pdf>



Figure 27 – Existing EPTA Transit Lines



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Short Term Ridership Estimate

Historic ridership numbers for regional MARC stations are provided in *Figure 28*. Short term projections for NorthPort ridership were determined based on the following:

- Number of historic riders using Duffields stop
- Diversions from other nearby MARC stations
- Anticipated housing and commercial entertainment growth in the region and potential transit usage

*Figure 28 – Historic Weekday Ridership at MARC Stations
(12 Month Averages by Calendar Year)
Obtained from MTA*

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Martinsburg	160	178	183	197	212	214	209	196	191	187	180	167
Duffields	145	162	158	165	174	176	173	160	146	149	167	144
Harpers Ferry	122	142	133	131	137	135	137	116	86	100	103	89
WV Total	427	482	474	493	523	525	519	472	423	436	450	400
Brunswick	683	691	663	709	747	745	774	751	706	722	643	582
Point of Rocks	408	427	436	437	440	453	490	484	463	427	455	418

Based on input received from the survey, ridership estimates should assume free parking options and some amenities, including a possible waiting room and restroom facilities, at the NorthPort station.

Ridership Diversion: Historic weekday ridership numbers were averaged over a 5-year period from 2010-2014. Based on the completed survey, diversion percentages were applied to each station's 5-year ridership average number to estimate those that would use the NorthPort station. From the post card survey, only about 60% of the current Duffield riders would use the NorthPort location. It was assumed the remaining users would divert to other locations, but it is unlikely users would travel the extra-long distance to Brunswick or attempt the fairly inaccessible Harper's Ferry station that has inadequate parking. The NorthPort Station will have better parking, easier access and amenities; therefore, it was assumed that about 80% of the Duffields riders will eventually use the new station. This estimation process resulted in approximately 270 riders for NorthPort.

Housing Development: Additional ridership is expected based on continued housing development and population increases in the region. *Figure 29* illustrates future property development plans in the Ranson and Charles Town area. Several of these properties are expected to include housing construction over the next 5-8 years. These include Shenandoah Springs, Clay Hill Farm, Lakeland Place and President's Pointe. It is difficult to determine the exact timing of the development, but expectations are that these locations could result in nearly 2,000 new households in the Ranson area.

The estimation on how these new regional households could impact transit ridership was based on information from the CENSUS and the American Community Survey (ACS). Jefferson County has the highest levels of multimodal activity related to work commuting in the region. Only 74.0% of commuters drive alone, which is approximately 2.0% below the national average and 6.0% below the HEPMPPO regional average. Carpooling (13.0%) is the second most popular mode of travel for Jefferson County commuters followed by working from home (6.0%), walking or biking (5.0%), and public transit (3.0%). The public transit usage relates primarily to the use of MARC rail service to areas in Maryland and Virginia. As illustrated in



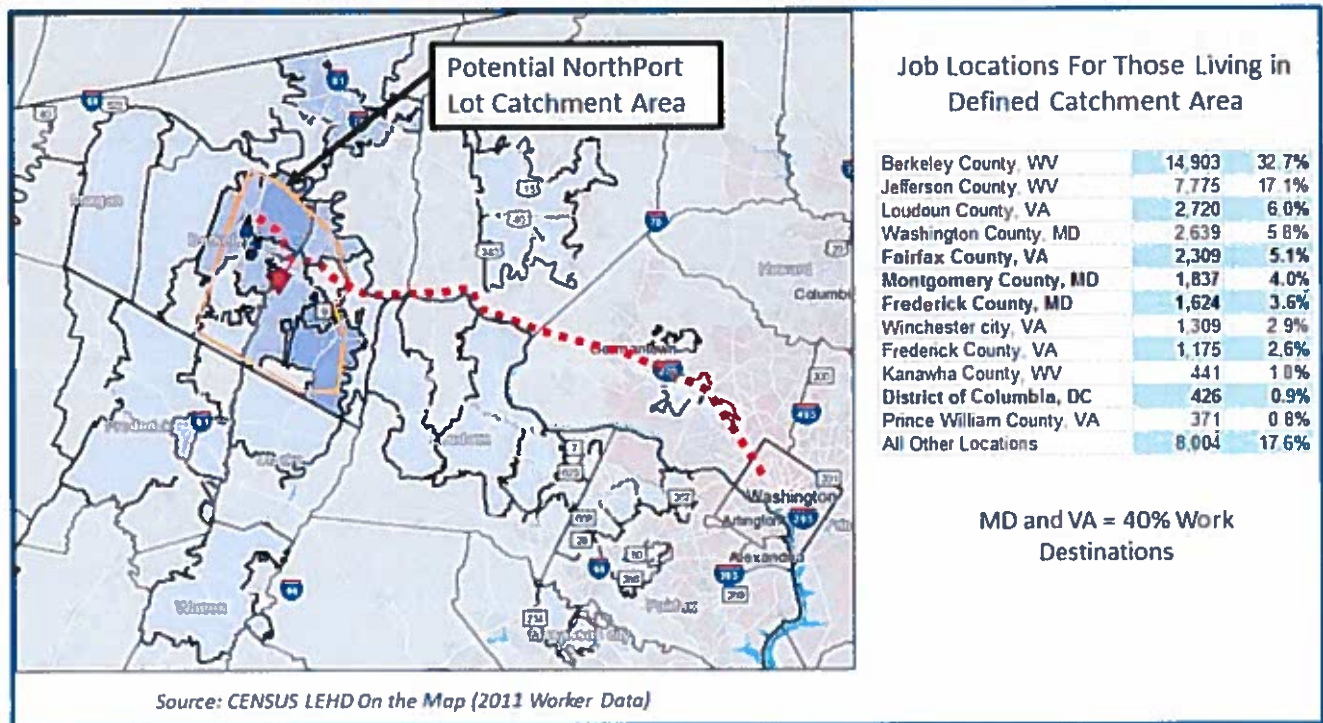
Figure 30, approximately 40% of Jefferson County resident workers are employed in those areas. Based on the current public transit usage rates, additional NorthPort ridership related to new housing and population growth in the region could result in 50 additional riders in the short term.

Figure 29 – Housing Development in Region



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Figure 30 – Worker Destinations for Current Households Located in Jefferson County (CENSUS LEHD)



Potomac Entertainment District: A Commercial and retail development is planned along the Route 9 Corridor, between Hollywood Casino & Racing, through Potomac Marketplace, up to the Jefferson Orchards property. The development has the potential to elevate regional tourism and provide a catalyst to the county’s economy. The NorthPort station is in very close proximity to this development and would be an important component in attracting major businesses and providing multi-modal access. An evaluation of the potential trip generation characteristics was conducted using land use classifications contained within the *Institute of Transportation Engineering (ITE) Trip Generation Handbook, 9th edition*. Categories of land use (e.g. resort hotels, entertainment centers, etc.) that could attract visitors from areas in Maryland and Virginia were used to estimate potential ridership to the NorthPort station. These estimates assume that other transportation options including regional bus or private shuttle service would be provided from NorthPort to the entertainment locations. Based on the planning-level estimate, an additional 90 riders are estimated at the NorthPort station on an average weekday.

Short Term Ridership: Based on the above assessments, short term ridership at the NorthPort station is estimated to be nearly 410 riders on an average weekday as summarized in *Table 6*.

Table 6 – NorthPort Short Term Ridership Estimate

Category	Average Weekday Ridership Estimate
Diversion from other MARC stations	270
New Regional Housing Development	50
Potomac Entertainment District	90
Total	410



Long Term Ridership Estimate

Additional ridership growth at the NorthPort station, beyond that estimated for the short term conditions, will be correlated to the planned development at the Jefferson Orchards site and additional housing and commercial regional growth throughout eastern portion of Jefferson County.

Jefferson Orchards: The land development plan for Jefferson Orchards includes zoning for both residential and commercial development. The full build-out consists of over 1,000 residential units (both single family homes and townhouses) in four of the zoned transect areas of the property. In addition, over 870,000 square feet of commercial space is available with most designated for the special zoning districts on the property.

Ridership estimates related to development at Jefferson Orchards was estimated using available tools including the EPA's *Mixed-Use Trip Generation Model*² and available research data on travel mode splits at transit oriented development sites.³ It is projected upon full build-out of the property, ridership may increase by about 400 riders per day.

Other Regional Development: The current HEPMPO Long Range Transportation Plan (LRTP) provides longer term forecasts of housing and employment growth out to a horizon year of 2040. This information is based on information from *Woods and Poole's 2012 State Profile* (containing county projections) and local development plans. Long term growth trends indicate the potential for over 7,500 additional households in Jefferson County (beyond that projected in the short term and that for Jefferson Orchards). Based on the current public transit usage rates, additional NorthPort ridership related to new housing and population growth in the region could result in an additional 170 riders on an average weekday.

Additional commercial and entertainment districts in the region and other regional employment generators can have a significant impact on future ridership trends. The viability of ridership growth at NorthPort will also be tied to adequate transit service. If NorthPort station is constructed, EPTA will need to evaluate the role of NorthPort in its transit system as to maximize the potential ridership and multi-modal access opportunities in the region.

Long Term Ridership: Based on the above assessments, long term ridership at the NorthPort station is expected to be nearly 1,000 riders on an average weekday as summarized in *Table 7*

Table 7 – NorthPort Long Term Ridership Estimate

Category	Average Weekday Ridership Estimate
Short Term Ridership Estimate	410
Jefferson Orchards Full Build-Out	400
Other Regional Development	170
Total	980

² <http://www2.epa.gov/smart-growth/mixed-use-trip-generation-model>

³ <http://www.vtapi.org/tdm/tdm45.htm> (Table5)

Traffic Assessment

Access to Jefferson Orchards is currently from NorthPort Avenue, which intersects with WV 115 and heads northeast across Route 9 onto the property. Initially, NorthPort Avenue is expected to serve as the primary access to the station and parking facilities. As the Jefferson Orchards property is developed, additional access options may be needed and a formal traffic impact study should be undertaken. This section provides an initial assessment of traffic operations for short term and long term development assumptions at the two intersections along WV 115 (NorthPort Avenue and Wiltshire Road) as highlighted in *Figure 31*.

Figure 31 – Primary Intersections Affecting NorthPort Station Access



Analyses have been conducted to examine the impacts of future traffic growth on intersection operations related to the NorthPort Station and Jefferson Orchards development. The Synchro and SimTraffic software tools have been used to analyze traffic conditions based on traffic volume growth and intersection and signal characteristics. Synchro is a software application for optimizing traffic signal timing and performing capacity analysis. SimTraffic performs micro simulation and animation of vehicular traffic to allow for estimation of queuing.

Traffic analyses have been conducted for several scenarios: (1) existing conditions, (2) short term projections including NorthPort Station with no other development at Jefferson Orchards, and (3) longer term projections that include transit oriented mixed-use development at Jefferson Orchards. Potential mitigation strategies are discussed for scenarios in which intersection congestion exceeds acceptable standards.

Existing Conditions

An analysis was conducted for existing conditions to identify if there are any current traffic concerns at the intersections on WV 115. The Synchro software analysis utilizes procedures in the Highway Capacity Manual to estimate key measures include volume to capacity ratio (V/C) and level-of-service (LOS). Values of LOS of "E" or "F" indicate intersection movements with significant delays or queuing.

Available traffic count and signal timing data was compiled from WVDOH. That data was complemented by peak hour turning movement counts conducted on March 18–19, 2015 at the intersection of WV 115 and Wiltshire Road. The existing conditions analysis results are provided in *Figure 32*. The analysis indicates that both intersections currently operate at an acceptable LOS. The only significant queuing that was observed during the peak hours was

related to a crossing train that impacted vehicles to and from Luther Jones Road. Increased train operations in the future could create additional delays and affect overall intersection operations.

Figure 32 – Existing Roadway Capacity Analysis

Intersection Movement	AM Peak Hour: 8:00 – 9:00 AM			PM Peak Hour: 4:00 – 5:00 PM		
	Delay (sec/veh)	V/C Ratio	LOS	Delay (sec/veh)	V/C Ratio	LOS
WV 115 & Wiltshire Rd / Luther Jones Rd						
Overall Intersection	13.2	-	B	15.7	-	B
Eastbound Left	16.0	0.14	B	19.1	0.40	B
Eastbound Through/Right	16.3	0.38	B	17.6	0.44	B
Westbound Left/Through/Right	14.8	0.13	B	15.5	0.13	B
Northbound Left	19.0	0.30	B	21.2	0.52	C
Northbound Through/Right	4.4	0.06	A	5.4	0.14	A
Southbound Left	10.2	0.01	B	13.1	0.02	B
Southbound Through	11.1	0.21	B	13.6	0.13	B
Southbound Right	11.1	0.19	B	13.3	0.08	B
WV 115 & NorthPort Avenue						
Southbound Approach	9.8	-	A	10.7	-	B

NorthPort Station - Short Term

The completion of the NorthPort station will attract additional vehicle trips to the WV 115 intersections with Wiltshire Road and NorthPort Avenue. An analysis scenario was developed that assumes 250 additional vehicles access the station each day based on the expected daily ridership and available parking spaces at the station. This scenario assumes no other significant development at Jefferson Orchards including any commercial or office space. EPTA transit buses are also expected to access the site under this scenario, though the number of buses is assumed less than 10 per day.

Based on existing MARC train schedules, current AM departures from Duffields stop include 5:16am, 5:41am and 6:41am. At NorthPort station, departures would be expected to be about 5-7 minutes earlier. With riders typically arriving at least 15 minutes before departure, most vehicles would arrive before 6:15am. As a result, it is expected the NorthPort station would have a minimal impact on morning peak hour congestion or traffic near North Jefferson Elementary School. Under a conservative assumption, 10% of the daily commuters were added to the morning peak hour traffic to identify if any congestions issues would occur. Return trains at Duffields are currently at 5:25pm, 6:18pm and 6:59pm. Trips to and from NorthPort station are expected to be distributed across the evening peak period. As a conservative estimate, 20% of the daily commuters are assumed to be added to the evening peak hour traffic volume to estimate delay impacts.

As illustrated in Figure 33, the WV 115 intersections are expected to operate at a sufficient LOS under this short term scenario. As such, no significant improvements are required to the existing intersection configurations.



Figure 33 – NorthPort Station Short Term Analysis

Intersection Movement	AM Peak Hour: 8:00 – 9:00 AM		PM Peak Hour: 4:00 – 5:00 PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
WV 115 & Wiltshire Rd / Luther Jones Rd				
Overall Intersection	13.3	B	15.7	B
WV 115 & NorthPort Avenue				
Southbound Approach	9.9	A	11.8	B

The NorthPort short term ridership assessment included the potential impacts of the Potomac Entertainment District. These additional trips are assumed to be distributed across the day and are not expected to result in individual vehicle access to the site. Instead, such riders may be served by private shuttles or additional EPTA bus service. These additional shuttle buses are expected to be distributed across the day and not be of a level to jeopardize intersection operations in the short term.

NorthPort Station – Long Term

The long term impacts on vehicular traffic access to the NorthPort station site are affected by the growth in transit ridership as shown previously in *Table 7* and other development traffic related to Jefferson Orchards. Much of the transit ridership growth is anticipated to be from those originating or destined to Jefferson Orchards. As a result, the additional ridership is not expected to generate vehicle trips that would impact the access roads and intersections along WV 115. Through the planned neighborhood design, these riders would primarily access the station by either the walk or bike modes. Other regional housing and employment growth, outside of Jefferson Orchards, could result in up to 200 more vehicles accessing the NorthPort Station over the daily period. As discussed for the short term estimates, many of these vehicles would occur outside of the typical AM and PM peak traffic hours.

Additional test runs were conducted to determine what traffic volume increases (over existing conditions) would result in unacceptable intersection operations. *Figure 34* summarizes the results of the test runs.

Figure 34 – Traffic Volume Increases Resulting in Need for Intersection Improvements

Intersection	Condition	AM Peak Hour Volume Increase Resulting in Condition (above existing)	PM Peak Hour Volume Increase Resulting in Condition (above existing)
WV 115 / NorthPort Avenue	Unacceptable Intersection Delays (Signal Warranted at Intersection)	+ 280 NorthPort Ave SB Left Turn Vehicles	+ 200 NorthPort Ave SB Left Turn Vehicles
WV 115 / Wiltshire Road	Unacceptable Intersection Delays	+ 1,025 Wiltshire EB Left or WV 115 SB Right Turn Vehicles	+ 900 Wiltshire EB Left or WV 115 SB Right Turn Vehicles



Traffic directly attributable to NorthPort Station will most likely not meet the threshold traffic increases shown in the figure; however, some strategies may be implemented to improve safety and to ensure that turning vehicles encounter small delays.

The development at Jefferson Orchards will also generate a significant number of vehicle trips, not related to the use of NorthPort Station. These additional trips will be estimated in future traffic impact studies conducted for the site development. This additional traffic, which could exceed 1,000 vehicle trips in the AM and PM peak hours, may result in an unacceptable LOS at each of the WV 115 intersections. Under such a scenario, additional mitigation strategies may be required for implementation.

Mitigation Strategies at Intersections

As addressed above, the NorthPort station, itself, is not expected to generate enough vehicle trips to require significant capacity increasing projects along WV 115. However, increased turning movements on NorthPort Avenue may initiate a need to signalize the intersection with additional exclusive turn lanes. Signalization would also allow for the inclusion of pedestrian phasing at the intersection, allowing for safer pedestrian access to the station.

As the Jefferson Orchards development progresses, mitigation strategies and additional intersection improvements will likely be required to alleviate congestion. Using the Synchro and Simtraffic software, scenarios were analyzed to determine a package of strategies that could address future build-out conditions at Jefferson Orchards. The strategies, as illustrated in *Figure 35*, include signalization and widening the NorthPort Avenue intersection with WV 115, widening of the intersection of Wiltshire Road and WV 115, and possible widening of WV 115 to four lanes between the two intersections.

Figure 35 – Potential Intersection Improvement Strategies

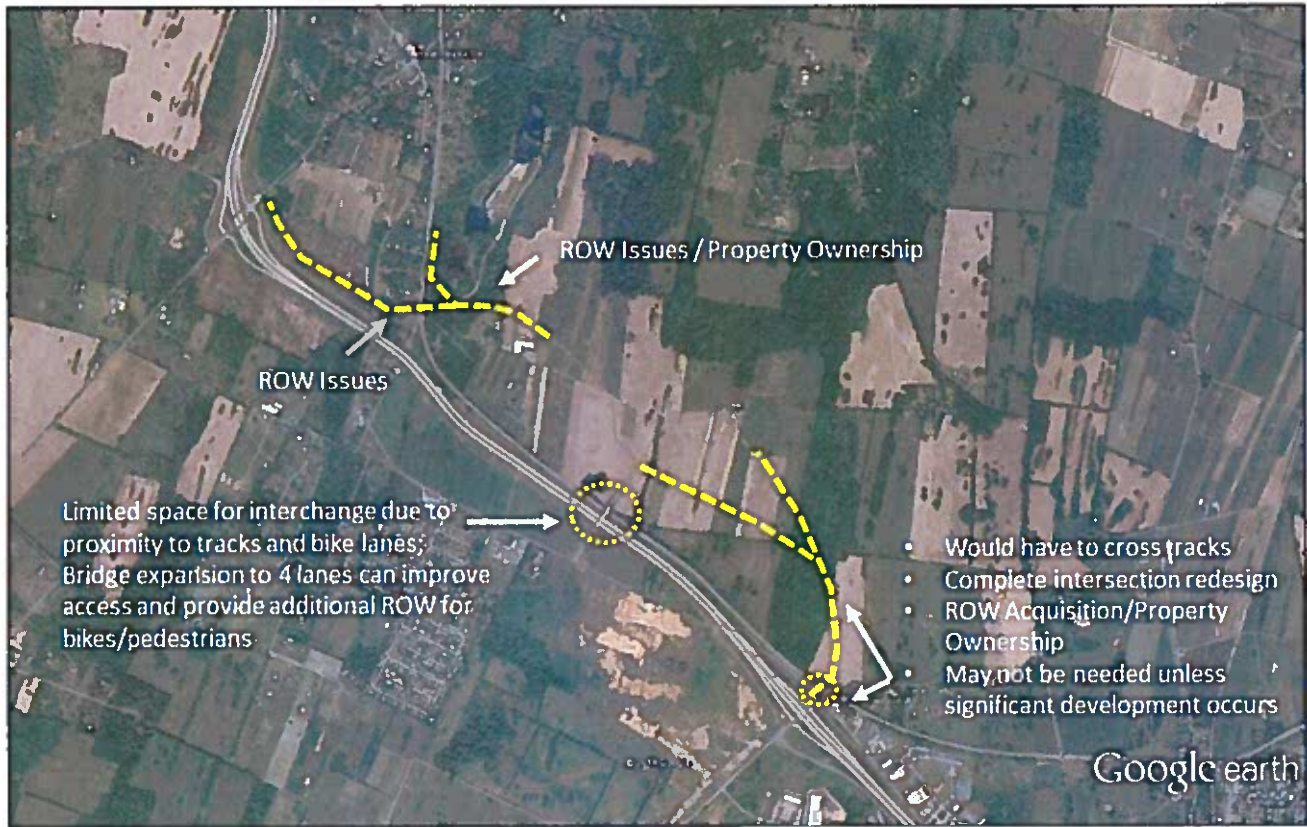




Other Transportation Access Options

A qualitative assessment of other transportation access options was conducted with input from the project task force. Figure 36 summarizes key access alternatives and issues that may be considered in future transportation studies for the Jefferson Orchards development.

Figure 36 – Assessment of Other Transportation Access Options



Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)



Positive Community Impacts

Along with the City of Ranson's economic redevelopment efforts, the NorthPort Station will provide access to jobs, regional employment centers, and attract new visitors to the tourist attractions in the area including the Harpers Ferry National Park, Washington Heritage Trail, John Brown Museum historic sites, Charles Town Races and Slots, Appalachian Trail, and other outdoor recreation activities and planned entertainment districts. Commuter and passenger rail service and bus connections to access the amenities of the region will reduce the transportation cost to the average visitor.

Boost the Local and Regional Economy

In conjunction with the Ranson Renewed Plan and the Ranson/Charles Town Brownfields Area-Wide Plan, the TOD area plan serves as a national model for how small rural cities can foster sustainable economic development and create livable communities through targeted strategic planning and investments like the NorthPort Station. The development around the station will create new business opportunities, support economic development, and create new jobs and neighborhoods.

In addition to benefiting cyclists, outdoor enthusiasts, and all Jefferson County residents, the NorthPort Station will also positively benefit historically underrepresented groups, including: economically disadvantaged populations, non-drivers, senior citizens, and person with disabilities by enabling these populations to travel without the need of an automobile, thereby enhancing their quality of life and providing access not previously available.

Property Value

The NorthPort Station will also benefit the community through an increase in property values. Research has shown that property values located near train stations increase between 4% and 49%. It is likely that property values in the Ranson and nearby towns will benefit from a new train station. Property values may increase significantly more through time as ridership increases at the station and as new economic development continues throughout the area.

Encourage Bicycle and Pedestrian Usage

The NorthPort Station will have connections from the TOD neighborhood and employment center to the regional bike path along Route 9, with connections to Martinsburg, Shepherdstown, Charles Town and Harpers Ferry, and other attractions in the immediate vicinity. Encouraging bicycle travel will reduce vehicular travel. The environment created by such multimodal use boosts the effectiveness of the train station and its impact on the local economy.

Reduce Greenhouse Gas Emissions and Reliance on Foreign Oil

The project will promote environmental sustainability by improving energy efficiency, reducing dependence on oil, reducing greenhouse gas emissions, and providing other qualitative benefits to the environment. Increased use of multimodal travel will result in significant, measurable air quality improvements throughout the region. In addition, by implementing the NorthPort Station, a cultural shift will begin to occur by introducing thousands of current residents and millions in future generations, to the benefit of travel by means other than personal automobile.

NORTHPORT STATION



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Implementation Strategy

The NorthPort Station Task Force developed the following implementation strategy to move the project toward completion based on the current project status. The implementation strategy identifies objectives and concrete action strategies that should be undertaken over a multiple-year horizon, the timeframe and probable costs for implementation of each recommendation, the potential sources of funding available to help offset costs associated with each recommendation, and the entities that should be involved in implementing the recommendations and achieving each objective. The implementation strategy is focused on four objectives: (1) Establishing a project structure and confirming the roles of key parties for implementation; (2) Positioning the Jefferson Orchards property for sale and TOD development; (3) Securing funding for design, engineering and other pre-construction activities, and conducting those activities; and (4) Securing funding for construction, and conducting those activities.

GOAL	OBJECTIVES AND ACTION STRATEGIES	TIMEFRAME	PROBABLE COSTS	SOURCES OF FUNDING	LEAD PARTNERS
Objective #1: Establish a project structure and confirm the roles of key parties to conduct the NorthPort Station project.					
Confirm vital partnerships and establish a structure to conduct the project	R1.1 – Establish a formal relationship between Jefferson Orchards and the City of Ranson through development of a Memorandum of Understanding (MOU) regarding development of the Jefferson Orchards property as a mixed-use Transit Oriented Development (TOD). The MOU should detail the terms of the dedication of land in the Jefferson Orchards property, the principles of a TOD, and potential approaches to identifying and applying for grant funding for the project. The MOU will confirm that the "Land Development Plan and Plat" for the Jefferson Orchard property, approved by the Ranson Planning Commission on March 16, 2012, includes the dedication of land for the purposes of a multimodal transit station. That MOU also specifies that the Northport Multimodal Station concept plan created in this feasibility study is incorporated into and part of the Land Development Plan and Plat approved by Ranson for the future development.	June-July 2015	Consultant/Legal costs	Jefferson Orchards, EPTA, Ranson (Each party to bear own costs)	City of Ranson Jefferson Orchards
	R1.2 – Establish a formal relationship among the City of Ranson, the West Virginia State Rail Authority, the Hagerstown-Eastern Panhandle Metropolitan Planning Organization, and the Eastern Panhandle Transit Authority through development of an MOU to coordinate development of the Northport Station. The MOU should discuss the roles of each party, designation of a parties to own and operate the facility, financial roles and commitments of each entity, co-location of bus and rail service at the proposed station, and other implementation issues.	June-July 2015	Consultant costs	EPTA, Ranson	City of Ranson WV State Rail Authority EPTA HEPMPA
Cultivate and maintain support from key stakeholders	R1.3 – Maintain the "Northport Station Task Force" as a base of support from key organizations, providing periodic updates to its members, and using its members to build support for funding proposals and other approvals.	Ongoing until station is opened	NA	NA	MOU parties
	R1.4 – Use briefing materials, press releases, web site updates, and in-person briefings to key organizations and the public to maintain support and momentum.	Ongoing until station is opened	NA	NA	MOU parties

NORTHPORT STATION



GOAL	OBJECTIVES AND ACTION STRATEGIES	TIMEFRAME	PROBABLE COSTS	SOURCES OF FUNDING	LEAD PARTNERS
Identify owner/operator of Northport Station	R1.5 – Before the station is constructed, MOU parties will need to determine which entity will operate, manage and maintain the Northport Station, and which parties might contribute financially to that O&M.	Prior to construction	TBD	TBD	Designated entity from MOU parties, potentially WV State Rail Authority, City of Ranson, or future developer
Objective #2: Position the Jefferson Orchards property to market and sell to a regional or national mixed-use developer.					
Strategically position the Jefferson Orchard property in the marketplace	R2.1 – Jefferson Orchards to continue to market the property for development compatible with the location of the Northport Station and its use as a commuter rail station and bus terminal.	Summer 2015	NA	NA	Jefferson Orchards, in consultation with City of Ranson
	R2.2 – Consult with the Carl M. Freeman Companies about collaboration on the development of Northport in conjunction or aligned with development of the Potomac Entertainment District.	Summer 2015	NA, except potential consultant costs	NA	Jefferson Orchards
	R2.3 – Consider extending the Potomac Entertainment District (PED) Community Enhancement District (CED) boundary to include the Northport Station, or consider establishment of stand-alone Northport CED. Likewise, consider whether to include Northport in a PED Tax Increment Finance (TIF) issued by Jefferson County, or to establish a stand-alone Northport TIF with Jefferson County. In 2014, the City of Ranson was granted home rule powers through the West Virginia Municipal Home Rule Pilot Program Phase II. Home rule powers allow the City of Ranson to establish CEDs which allow the city to use non-tax assessment fees to support public bonds for construction of infrastructure, public parks and recreational facilities, and other amenities at both new developments and areas targeted for revitalization – which could include the Northport Station facility.	2015-2016	Consultant costs	City of Ranson	Jefferson Orchards City of Ranson
Objective #3: Secure funding for design, engineering, permitting and other pre-construction costs of the Northport Station, and conduct these activities.					
Determine project costs and schedule	R3.1 – Finalize the estimate of probable costs and complete the technical and cost proposal for preliminary engineering, permitting, and final design for development of the Northport Station and associated mixed-use development.	2015	\$10,000 - \$20,000	MOU parties	Baker
	R3.2 – Prepare a detailed project schedule that includes each component and phase of the development project. A realistic project schedule is a key element in identifying viable sources of funding and building and implementing a funding strategy.	2015	\$2,500 - \$5,000	MOU parties	Baker

NORTHPORT STATION



GOAL	OBJECTIVES AND ACTION STRATEGIES	TIMEFRAME	PROBABLE COSTS	SOURCES OF FUNDING	LEAD PARTNERS
Secure pre-construction funding	<p>R3.3 – Seek WV funding for approximately \$1.5 million in pre-construction design, engineering, permitting, construction bid documentation, and other activities to get the Station project “shovel-ready”. These pre-construction funds may come in phases. Many of these sources depend on congressional re-authorization of MAP-21. Sources could include:</p> <p><u>State of WV</u></p> <ul style="list-style-type: none"> WV state legislature, via Rail Commuter Access Fund WV state legislature, through transfer to WV State Rail Authority Section 5311 pass-through to HEPMPO Transportation Alternatives Program via WV DOT <p><u>Federal</u></p> <ul style="list-style-type: none"> TIGER Planning grant (if Congress funds) USDA Rural Development, Community Facility grant <p>Critical first steps in pursuing potential pre-construction funding are to:</p> <ul style="list-style-type: none"> Seek and secure support of the eastern panhandle legislative delegation Seek and secure support from the WV congressional delegation Meet, perhaps several times, with WV DOT officials including senior management, planning office, transit office Meet with U.S. DOT FTA officials to obtain guidance and support Seek support from Office of the Governor and WV legislative leadership <p>These efforts will require both conference calls and visits to the State Capital in Charleston, the WV congressional delegation, and the Federal Transit Administration HQ in Washington, DC. The first outreach should be to WV Senator Herb Snyder, the author and primary sponsor of the WV Commuter Rail Fund legislation, and to Cindy Butler, the Director of the West Virginia State Rail Authority. These efforts will also require that the MOU parties draft and submit effective grants packages for available funds.</p>	2016	\$1.0 to \$1.5 million, plus costs of grants consultants	State & Federal grants (see column to left)	MOU parties, potentially with consultant support
	R3.4 – Identify and secure matching funds of between 20-40%	2016	\$200,000-\$600,000	Ranson CED or TIF; MARC/WTA; EFTA, Federal Home Loan Bank Community Investment Program subsidized loan	MOU parties
Conduct design, engineering and permitting activities	R3.5 – Determine the party that will administer and manage the design, engineering and other pre-construction activities.	2016, after securing funding	NA	NA	Likely WV State Rail Authority, HEPMPO, or City of Ranson
	R3.6 – Ensure robust public and stakeholder outreach in design, to maintain community support.	2016, during D&E	NA	NA	Lead on Task R3.3, working with Northport Task Force
	R3.7 – Procure contractors for D&E, permitting and other pre-construction activities.	2016 or 2017, depending on when funding secured.	\$1 million - \$1.5 million	Sources listed in R3.3	Lead on Task R3.5

NORTHPORT STATION



GOAL	OBJECTIVES AND ACTION STRATEGIES	TIMEFRAME	PROBABLE COSTS	SOURCES OF FUNDING	LEAD PARTNERS
Objective #4: Secure funding for construction, and conduct construction.					
Identify and pursue public funding opportunities	<p>R4.1 – Identify and evaluate the viability of potential state and federal sources of funding for project components. Much of this funding depends upon reauthorization of MAP-21. Sources could potentially include:</p> <ul style="list-style-type: none"> • Transportation Alternatives Program • TIGER • Section 5309 Small Starts and/or Bus & Bus-Facilities grants • WV legislative funding into Commuter Rail Fund or infrastructure bonding package • Surface Transportation Project funding, via WV DOT • Maryland Transportation Administration (unlikely, particularly if State of WV not funding) • USDA Rural Community Development grants and loans • FHLB Community Investment Program loans <p>To determine the viability of each funding source for the project, the project team should identify the following information for each potential funding source: type of assistance (i.e., loan, grant, etc.), goals and priorities of the funding agency/program, eligible uses of funding (i.e., design, construction, remediation etc.), window of opportunity for application submission, minimum and maximum funding request amounts, percent and type of matching funds required, availability of funding, and size of potential award. Information about each funding source should then be compared to the Northport Station project components and timeline to identify and prioritize the funding sources with the greatest potential for an award.</p> <p>Critical first steps in pursuing potential construction funding will be:</p> <ul style="list-style-type: none"> • Re-confirm support of the eastern panhandle legislative delegation • Re-confirm support from the WV congressional delegation • Meet with WV DOT officials including senior management, planning office, transit office • Meet with U.S. DOT FTA officials to obtain further support • Seek support from Office of the Governor and WV legislative leadership <p>These efforts will require both conference calls and visits to the State Capital in Charleston, the WV congressional delegation, and the Federal Transit Administration HQ in Washington, DC.</p> <p>These efforts will also require that the MOU parties draft and submit effective grants packages for available funds.</p>	2017-beyond	\$11M-\$14M, plus costs of grants consultants	See potential sources in column to left	MOU parties
Identify & confirm matching funds	<p>R4.2 – There must be a 20-50% match on construction to be competitive for grant funding, which could include local sources, developer contributions,</p>	2017-beyond	\$2.2 million to \$7 million, depending on construction	See potential sources in column to left	MOU parties

NORTHPORT STATION



GOAL	OBJECTIVES AND ACTION STRATEGIES	TIMEFRAME	PROBABLE COSTS	SOURCES OF FUNDING	LEAD PARTNERS
	and/or proceeds from borrowings (debt that will of course need to be serviced over time). Potential sources could include: <ul style="list-style-type: none"> • Value of Jefferson Orchards land grant • Future developer contributions • Ranson CED and/or Jefferson County TIF bond proceeds • EPTA contributions • FHLB Community Investment Program loans • USDA Community Facilities grants or loans • State of WV resources including state bonding package proceeds (not yet authorized or issued), STP pass-through, WV Rail Commuter Access Fund 		cost and level of match required		
Seek inclusion of project in HEPMPO's and State's Transportation Improvement Plans	R4.3 – To secure and use funding, the project sponsors and supporters should seek to have HEPMPO and the WV DOT include the project as a priority in their Transportation Improvement Plans	2016, at both pre-construction and construction phases	NA	NA	MOU parties, working with HEPMPO
Conduct construction and administer funding	R4.4 – This is a major set of tasks, requiring a separate analysis beyond the scope of this implementation plan.	2017 beyond	Consultant costs	NA	MOU parties / lead Northport Station entity.



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Next Steps

This report outlines the feasibility and required elements for a new NorthPort Station. To make the NorthPort Station a reality, a number of steps must be undertaken by local and regional stakeholders. These steps include:

- ✓ **Secure funding for pre-construction activities**
- ✓ **Obtain Host Railroad (CSX) Support**
- ✓ **Identify Project Owner**
- ✓ **Preliminary Engineering**
- ✓ **Environmental Clearance**
- ✓ **Secure funding for construction activities**
- ✓ **Final Engineering**
- ✓ **Construction**

The first step in the implementation of the NorthPort Station is to identify and assemble a funding package for the pre-construction design and engineering and permitting as identified in the **Implementation Plan** section. Given the scarcity of local resources, it will be difficult to identify the required match that most grant programs require. Ranson should pursue all sources of private, local, and state funding that may be used to match federal grant programs. Once the local funding is identified, the Federal grant program process will become much easier.

After the initial funding is secured for the project engineering, negotiations should be escalated with CSX for their approval on the selected alternative. Although initial discussions have been held, a final decision from CSX is unlikely until construction funding has been secured and the project can move forward. Political support for the project is strong and the new station will have minimal impact on CSX freight operations, making the project a logical choice to move forward as a regional priority if funding is in place.

Once support from CSX is gained, project stakeholders will need to identify project owners for each of the improvements based on the scenarios presented above. Identified owners must enter into agreements with the funding authority and other appropriate parties to move forward.

While owners are being identified, preliminary engineering based on the concepts outlined in the study should commence. Preliminary engineering should advance the project design to approximately 30%. Design reviews will need to occur with WV SRA, MTA/MARC and CSX, and the initiation of preliminary engineering, and a 30% design submission will likely be required prior to further advancement.

Prior to moving past preliminary engineering, the project will need environmental clearance under the National Environmental Protection Act (NEPA). This report preliminarily screened all indicators for an Environmental Assessment (EA), and found that there will likely be no issues receiving a Finding of No Significant Impact (FONSI). Traditionally, the EA is completed during the preliminary engineering phase, but some grant programs may require it to be completed prior to initiation of the project. The concepts presented in the report are advanced enough to successfully complete the NEPA process.

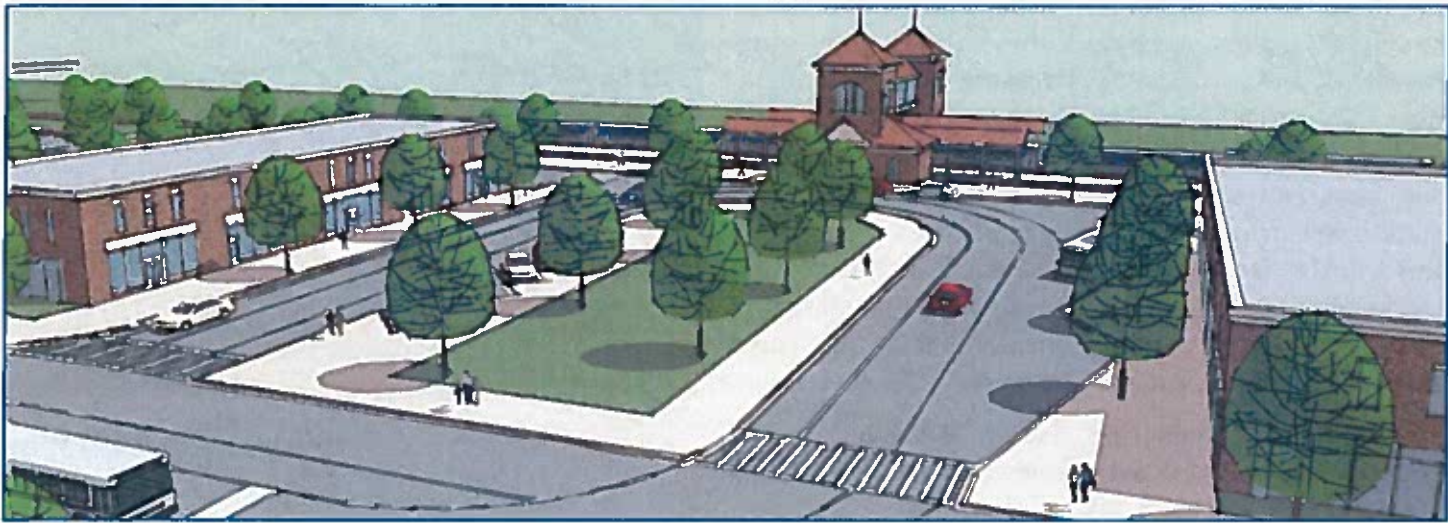


Upon receipt of FONSI and completion of preliminary engineering, the project will proceed into final engineering and securing construction funding. Typically, a 60%, 90%, and 100% design submission will need to be made to WV SRA, MTA / MARC and CSX prior to the initiation of construction.

Construction should take between six to 12 months, depending on the final complexity of the project as determined in the engineering phase. During construction of the platforms, and associated track infrastructure improvements, railroad protection forces will be needed.

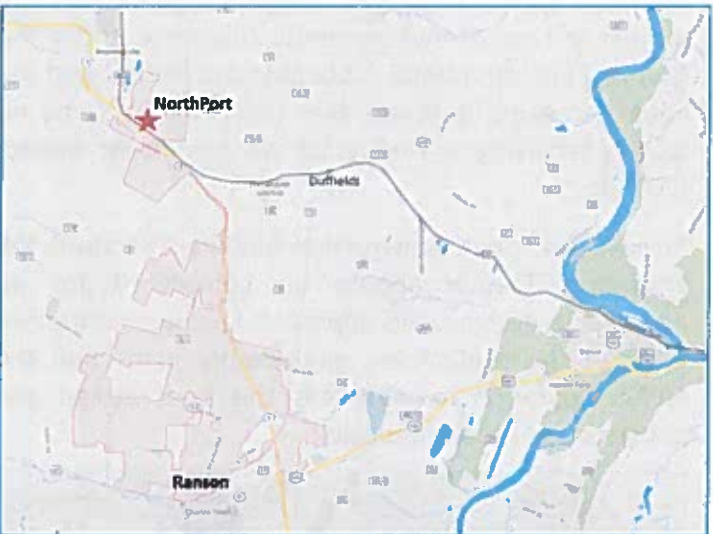
To save time, the NorthPort Station construction should be considered for an alternative design-build approach. Using this technique, a single contractor is given the preliminary engineering plans and the NEPA clearance to complete the final design and construction simultaneously.

Northport Station – Executive Summary



Background

NorthPort Station is a new MARC transit station and EPTA bus transfer center envisioned for the City of Ranson on the Jefferson Orchards property abutting Route 9 and the CSX railroad tracks.



The station includes a stand-alone building with an integrated pedestrian bridge that will replace the Duffields stop along MARC’s Brunswick Line. The NorthPort Station has strong support from West Virginia’s congressional delegation and state legislators. The West Virginia State Rail Authority has passed a resolution supporting the station relocation and has agreements with MARC and CSX. These efforts have led to this feasibility study that will be followed by the engineering and construction of the new station.

Regional Importance

NorthPort Station is the centerpiece of the region’s “*smart growth*” vision and sustainable, transit oriented development (TOD) planning efforts. The accessibility of regional commuter rail service will attract developers to Jefferson Orchards. The property has approved and vested plans of mixed use zoning that will support economic development opportunities in the region. The multi-modal facility will also serve as an EPTA bus transfer center that can be integrated with an enhanced bus route system to Martinsburg, Ranson, Charles Town and Harpers Ferry. The station will include bike and pedestrian facilities providing access to the TOD neighborhood and the regional bike path along Route 9.

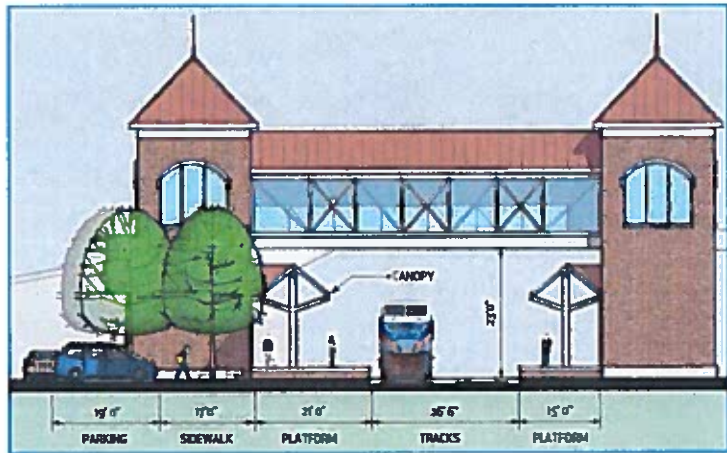


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NorthPort Station Site Layout and Costs

This feasibility study identifies a preferred location, for the station, a phased site plan with commercial building structures, estimated costs, traffic impacts on existing roadways, and a station development implementation plan. The NorthPort Station Task Force provided guidance and direction in developing the station area site plan and specific station design elements. The station will include ample parking spaces, an integrated bus transfer facility, a station building, 400' platforms with canopies, and a pedestrian bridge. The station is designed to fit the area's historical character. The costs of the initial site layout and station are:

- Preliminary Engineering - \$1.5 – 2.0 Million
- Final Design and Construction - \$11.1 – 14.3 Million



Ridership Projections

Short term MARC ridership projections at NorthPort Station have been estimated based on diversions from other nearby MARC stations, integration of EPTA bus services, anticipated housing growth in the region, and potential commercial and entertainment districts along the Route 9 corridor. Additional ridership growth, beyond that estimated for the short term conditions, will be correlated to the planned TOD development at the Jefferson Orchards property with additional housing, office and commercial growth. Daily MARC ridership projections were estimated as:

- Short term ridership = 410 riders/day
- Long term ridership = 980 riders/day

Future AMTRAK service at NorthPort Station could provide additional ridership demand and incentives for development at the site.



Implementation Plan

The first step in the implementation of the NorthPort Station is to identify and assemble a funding package for the preliminary design and engineering pursuing all sources of private, local, and state funding that may be used to match federal grant programs. After the initial funding is secured for the project engineering, negotiations should be escalated with MARC and CSX for their approval on the selected alternative. The project will need environmental clearance under the National Environmental Protection Act (NEPA) and the initial screening indicates that there will likely be no issues, receiving a Finding of No Significant Impact (FONSI).

To save time once construction funding is secured, the NorthPort Station should be considered for an alternative design-build approach (a single contractor is given the preliminary engineering plans and the NEPA clearance to complete the final design and construction simultaneously).



For Additional Information on the NorthPort Station Feasibility Study
www.hepmo.net/Northport

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Chris Kinnan <kinnan@gmail.com>
Sent: Thursday, June 18, 2020 4:57 PM
To: Stacey Pfaltzgraff
Subject: comment on Ordinance #2017-302

CAUTION: External Email

I strongly urge the Ranson City Council to vote no on Ordinance #2017-302. This ordinance is the culmination of a secretive and unethical process to convert historic farmland to a heavy industrial zone -- a process guided by state officials with personal financial stakes in the development. Ranson public officials should not carry the water for a shady backroom deal that will ruin the bucolic nature of our county and drive away good jobs and growth.

Indeed, the City of Ranson should not even have jurisdiction over Jefferson Orchards. The property was acquired through a "shoestring annexation" process so unfair and abusive that the state has since outlawed it. How many parents and students at North Jefferson Elementary -- the school adjacent to Jefferson Orchards-- are actually represented by the City of Ranson? This is a property in Kearneysville, as close to Shepherdstown as Ranson proper, and it is an abuse of power that Ranson officials would take action so opposed by the people living nearby.

Ordinance #2017-302 is also a misuse of federal tax dollars, which Ranson received to plan a sustainable housing community development at Jefferson Orchards. It is a profoundly cynical public action to twist grant money meant for new housing to instead benefit a foreign corporation building a gigantic industrial plant.

Rockwool came to our community to burn coal around the clock and emit staggering amounts of hazardous pollutants, grab millions in public subsidies, and refuse to pay its fair share of taxes. Ranson City Council should deny this ordinance, and force Rockwool to return with a plan to instead use the cleaner electric arc technology the company is already deploying in Europe.

It's time for Ranson officials to stand up for what's right. Make Rockwool protect West Virginians by using the best technology here. Vote to deny smokestack Ordinance #2017-302.

Sincerely, Chris Kinnan
 Jefferson County, West Virginia

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Eric Lewis <ejlewis@oll-cpas.com>
Sent: Thursday, June 18, 2020 4:05 PM
To: Stacey Pfaltzgraff
Subject: Public Comment in support of Jefferson Orchard Rezoning

CAUTION: External Email

Ms Graff:

Please accept this statement as one of full support of the Jefferson Orchards rezoning as per #2017-302.

Any property owner that invests in their property relies on government to follow its own rules and approve their projects if the property owner follow those rules. In this case, it seems an oversight on the scheduling of a notice created a situation that the regulations were not complied with. The property owner proceeded with the project under the full assumption that Ranson had complied with its own scheduling and advertising requirements. The right course of action is to correct that oversight by approving the rezoning as previously approved. Had Ranson advertised the meeting correctly, there is little evidence that public involvement would have been any different.

Even before COVID-19, Jefferson County needed high paying blue collar jobs with great benefits for its workers who necessarily travel outside of the county for work each day. This is even more the case now with so many out of work due to the global pandemic. This county can't just cater to white collar jobs for high income individuals. It must have a mix of jobs for all types of residents.

Rockwool will provide those jobs and will do so in a manner that is safe for the local environment and citizens. The plant is state of the art and is not in any way an eyesore on the community as some would have you believe. In fact, for six months out of the year, when vegetation is on the trees (like right now) it can't even be seen from the four lane highway that runs right beside it.

The WVDEP and USEPA have both concluded that this plan will have no negative effect on the people or animals of this county.

Please support the rezoning of this parcel.

Best,

Eric Lewis
 Shepherdstown, WV

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)



June 23rd, 2020

Re: Public Hearing, Re-zoning Jefferson Orchards

For almost a year prior to ROCKWOOL's official groundbreaking in June of 2018, ROCKWOOL was actively engaged in Jefferson County, attending and sponsoring events, making presentations to a cross section of the community and making ourselves available to answer any questions.

We were very excited when the exploratory meetings with the state and local authorities were complete and we could publicly announce our plans to build in Jefferson County.

Information was available for the community via numerous public meetings; multiple local media reports; public and private events; local officials visiting ROCKWOOL's Mississippi facility; publication of the air permit application via an extensive email list (530+ recipients) by the state environmental authority and in the local newspaper of record; public comment period on the air permit; and ROCKWOOL direct mailings. ROCKWOOL enlisted a West Virginia public relations firm in August 2017 to support its community outreach and project promotion efforts.

We detail these sources of public information and opportunities for the community to learn about the project below, broken down into pre- and post-groundbreaking phases.

Pre-formal groundbreaking (26 June 2018)

- **16 February 2017:** Several local elected and appointed Jefferson County public officials visited and toured the ROCKWOOL manufacturing facility in Byhalia, Mississippi. That facility, fully operational since 2014, is substantially the same as the one we're constructing and will operate in West Virginia. Local participants included County Commissioner Jane Tabb (now a representative of WVSD); John Reisenweber, Executive Director, Jefferson County Development Authority; Andy Blake, Ranson City Manager; and Todd Hooker and Tiffany Ellis Williams of the West Virginia Economic Development Authority.
- **06 July 2017:** ROCKWOOL press release ("ROCKWOOL to build multi-million dollar manufacturing facility in West Virginia, USA") announcing the choice of Jefferson County as the location for its North American expansion (see Appendix 07 for the press release).
- **06 July 2017:** Jefferson County Development Authority blog post announcing ROCKWOOL's (then doing business as Roxul) decision to build in Jefferson County, "ROXUL Will Build Manufacturing Plant in Jefferson County" (see Appendix 08 for the blog post).
- **07 September 2017:** Jefferson County Development Authority blog post announcing Roxul rebranding to ROCKWOOL ("Roxul rebrands to ROCKWOOL"). See Appendix 09 for the blog post.
- **September / October 2017:** Correspondence with the Adams family regarding concerns around lighting, sound and stack visibility
- **October 2017:** ROCKWOOL information pamphlet (see attached as Appendix 04) to all residents of Ranson (the town within whose jurisdiction our facility lies) as well as those living within a two-mile radius of the town.

- **October 2017:** ROCKWOOL joins Jefferson County Chamber of Commerce.
- **November 2017:** ROCKWOOL joins West Virginia Chamber of Commerce.
- **17 November 2017:** ROCKWOOL and local public officials participated in the “unveiling” of the site rendering (illustration of how the site would look when built). See article in local newspaper *Spirit of Jefferson* attached as Appendix 10 and supportive tweet by former Charles Town Mayor Scott Rogers, Appendix 11.
- **22 November 2017:** WV Department of Environmental Protection publishes in the local newspaper the official notice of ROCKWOOL’s (then operating as Roxul) air permit application, including instructions submitting comments during the 30-day public comment.
 - *(NB: some project opponents have commented that this notification was published on the day before the U.S. Thanksgiving holiday, suggesting this was done intentionally on a supposedly low-circulation day for the local newspaper, with the goal of reducing the chances of anyone noticing; leaving aside that ROCKWOOL played no role in the WVDEP publishing the notification on a given date, the editor of the local newspaper of record (Spirit of Jefferson) confirms that their newsstand sales that day were in fact above average).*
- **25 November 2017:** ROCKWOOL sponsors Ranson Christmas Tree Lighting; including fire truck train ride for children.
- **December 2017:** ROCKWOOL joins West Virginia Manufacturers Association; makes presentation at Association meeting introducing ROCKWOOL and the Jefferson County project.
- **January 2018:** ROCKWOOL circulated a follow-up brochure (see attached Appendix 09) to all Ranson households as well as those within a two-mile radius of the town.
- **30 January 2018:** ROCKWOOL meets with representatives of Blue Ridge Community and Technical College and Valley College to discuss employee training programs.
- **11 April 2018:** ROCKWOOL presents project to the group, Leadership Jefferson County, at the Jefferson County Development Authority.
- **21 April 2018:** ROCKWOOL sponsors Hospital Gala event, attended by local community leaders and other guests.
- **30 April 2018:** West Virginia Department of Environmental Protection issues ROCKWOOL air permit.
- **30 April 2018:** ROCKWOOL sponsors Jefferson County Chamber of Commerce Golf Tournament, with participation of local community and Chamber members.
- **03 May 2018:** ROCKWOOL sponsors and makes presentation at Jefferson County Chamber of Commerce lunch event.
- **21 May 2018:** City of Ranson Mayor Duke Pierson and City Manager Andy Blake visit ROCKWOOL facility in Byhalia, Mississippi.
- **29 May 2018:** Jefferson County Development Authority Executive Director Nic Diehl and West Virginia Economic Development Office Manager for Business Retention and Expansion Joy Lewis

visit ROCKWOOL facility in Byhalia, Mississippi.

- **26 June 2018:** ROCKWOOL issues press release on the formal groundbreaking; see Appendix 10 for the release.

Public body meetings: See below for two non-exhaustive lists of pre-groundbreaking public meetings, demonstrating the multitude of opportunities for community members to become informed and to engage with their elected and appointed local officials regarding the project; please note there are some overlaps and inconsistent references in these two lists:

- See Appendix 11 for the City of Ranson's 27 July 2018 public statement on community concerns, which includes "Ranson Approval Timeline and Public Meetings Timeline" as well as additional information regarding the project. The list includes ROCKWOOL-related public meetings dating to 12 April 2017.
- See attached also in Appendix 12 for list of public meetings provided by the Jefferson County Development Authority. The list encompasses public meetings dating from 17 January 2017 that were held by the JCDA; the Ranson City Council; the Ranson Planning Commission; the Charles Town City Council; the Charles Town Utility Board; the Jefferson County Commission; the Jefferson County Board of Education; and the West Virginia Infrastructure & Jobs Development Council.

Media articles: See attached as Appendix 01 for a representative sampling of local media coverage of ROCKWOOL's plans to build a new manufacturing facility in Jefferson County.

Post-formal groundbreaking

- **Public meetings:**
To respond to community concerns, ROCKWOOL participated in the following public body meetings between August and October 2018
 1. 07 August 2018: Public comment period at Ranson City Council meeting
 2. 16 August 2018: Jefferson County Commission
 3. 21 August 2018: Ranson City Council
 4. 23 August 2018: Shepherdstown City Council
 5. 27 August 2018: Jefferson County Board of Education
 6. 28 August 2018: Jefferson County Development Authority
 7. 04 September 2018: Charles Town City Council
 8. 16 October 2018: Jefferson County Development Authority
- **Open houses:**
In response to community concerns and interest in additional information, ROCKWOOL organized and conducted four open houses at the county community center in late August 2018. To support this effort, ROCKWOOL brought in experts from around its global operations as well as including the environmental consultants who supported ROCKWOOL in the air permit application process. The open houses were organized around the following topics/themes:
 1. About ROCKWOOL
 2. Production process
 3. Construction and permitting
 4. Air quality
 5. Water
 6. ROCKWOOL in the community

Unfortunately, project critics called on their supporters to boycott the open houses. This was unexpected given that the open houses were created to provide information that many of those

supporting the boycott criticized ROCKWOOL for not providing earlier. Nevertheless, approximately 250 community members attended.

We continue to view the boycott of the open houses as a lost opportunity for community members to learn about the facility and to share their concerns directly with us.

Additionally, the following dedicated digital sites were created to provide the community with easy access to information and our team.

- **Facebook page:**
Dedicated Facebook page as a forum for community discussion and to respond to community questions and concerns:
<https://www.facebook.com/ROCKWOOLRansonCommunity>
- **Microsite:**
Dedicated webpage to give community members easy access to wide-ranging information regarding the ROCKWOOL facility:
<https://www.rockwool.com/west-virginia/>

We structure the microsite based on themes community members ask about and that reflect search patterns on the site. The structure evolves over time (in content and placement of information), with the most sought-after information appearing highest on the page. The current structure/content is the following:

1. Job openings
2. Community support, involvement, and economic impact
3. Vendor and supplier application
4. Sustainable manufacturing in Jefferson County
5. Factory operations and production
6. Construction and permitting
7. Respecting the local environment in Jefferson County
8. About us

Dedicated email address: ransonquestions@rockwool.com

In sum, for nearly the past three years, ROCKWOOL has been highly-visible and continues to stay engaged in introducing the local community to its new Ranson facility.

Leslie McLaren
NA Manager Corporate Communications & Stakeholder Relations

/appendix



APPENDIX: Index

Appendix 01: Illustrative sampling of local pre-controversy media coverage

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Appendix 03: Jefferson County Development Authority blog post, detailing ROCKWOOL's decision to build in Jefferson County

Appendix 04: Jefferson County Development Authority blog post announcing Roxul rebranding to ROCKWOOL ("Roxul rebrands to ROCKWOOL")

Appendix 05: ROCKWOOL information pamphlet distributed to residents of Ranson, October 2017

Appendix 06: Correspondence with Adams Family

Appendix 07: Supportive tweet by former Charles Town Mayor Scott Rogers

Appendix 08: Article in local newspaper *Spirit of Jefferson*, covering the "unveiling" of ROCKWOOL's site

Appendix 09: Follow-up ROCKWOOL information pamphlet distributed to residents of Ranson, January 2018

Appendix 10: ROCKWOOL Group press release, detailing the groundbreaking at the Ranson site, 26 June 2018

Appendix 11: The City of Ranson's 27 July 2018 public statement on community concerns, including "Ranson Approval Timeline and Public Meetings Timeline"

Appendix 12: List of public meetings, dating from 17 January 2017, provided by the Jefferson County Development Authority

Appendix 13: Copy of Oral remarks made at June 23, 2020 Public Hearing by Leslie McLaren, NA Manager Corporate Communications & Stakeholder Relations



APPENDIX 01

Illustrative sampling of local
Pre-controversy media coverage

In the News



\$150 million plant coming to Ranson

ART COX JULY 06, 2017



Manufacturing company ROXUL will build a \$150 million plant in Jefferson County that is expected to create up to 150 jobs. The plant will be on about 130 acres on the Jefferson Orchards site in Ranson. (Journal Photo by Ron Agnir)

RANSON —A Denmark company has selected an old apple orchard in the city of Ranson as its home for a new 463,000-square-foot manufacturing plant that will produce high-performance industrial insulation and bring about 150 new jobs to the city and Jefferson County.

Roxul Inc. plans to construct the \$150 million plant on about 130 acres in the old Jefferson Orchards site along Route 9 in Ranson, city and county officials announced. The coming plant will produce fire-resistant “stone wool” insulation for buildings, including customized products such as acoustic ceilings, according to the company and local officials.

“I really am truly awful proud of what we have done,” said Ranson Mayor Keith “Duke” Pierson, referring to the collective state, county and city efforts to draw the company’s new operations to Jefferson County. “This is going to be some pretty-good paid jobs.”

Construction on the plant is set to begin in October, and the facility is expected to be completed by early 2020.

Roxul officials were looking to build a second facility on the East Coast, and its final two options were the Ranson site and another site in Jefferson County, officials said.

“It basically came down to two sites, and both of them were in

future abundant gas and electricity resources. With more than 400 acres, the site also offers considerable room for the company to grow its operations in the future.

The land for the site is zoned with an agriculture use but will be rezoned to a commercial use as part of an agreement struck with Roxul, officials said.

Ranson and Jefferson County officials worked with the West Virginia Development Office and the Jefferson County Development Authority to help bring the plant to a city with a deep industrial past.

The Ranson plant will be the company's second in the United States. The company's first U.S. plant is in Byhalia, Miss., a facility city and county officials visited while quietly negotiating with Roxul to build its plant in the city and Jefferson County. Pierson said employees worked with tablets and other technology throughout the Mississippi plant.

The old orchard property is owned by the Rolstans, a longstanding Jefferson County family, Pierson said. One family member, Mark Rolstan, a lawyer in Florida, was closely involved in the industrial development project's negotiations.

Jefferson County Commission President Peter Onoszko was among the officials who praised the effective teamwork among the jurisdictions involved that brought a major economic development win to the city and the county.

"The decision on the part of Roxul to locate a major production operation here will benefit the county in many ways above and beyond the obvious economic benefit," Onoszko said.

Onoszko pointed to 200 new jobs coming to Jefferson County over the past three months from announcements of companies with international operations moving or starting facilities here. "Jefferson County is gaining an international reputation," he said.

Negotiations with Roxul began seven months ago, and the project was code named "Operation Shuttle" to maintain confidentiality. The city, the county and the state officials involved also signed nondisclosure agreements.

County Economic Development Authority. "It really was a great example of cooperation and a commitment to team West Virginia."

Several frontline officials involved in the effort put in untold hours of work to notch the development win, Pierson said. "There was a lot of give and take."

Roxul's products are produced from a combination of natural basalt rock and recycled slag. Those materials, combined with technology, produce a mineral wool insulation product that is both effective and environmentally friendly, according to the company.

Part of the Rockwool Group, the company part of Rockwool International, the world's largest producer of mineral wool insulation with over 23 facilities in 14 countries.

"Roxul's expansion to West Virginia is a testimony to the state's global competitiveness and presents a great opportunity for West Virginia's high-quality workforce," offered West Virginia Secretary of Commerce H. Wood Thrasher in a prepared statement.

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MetroNews
July 6, 2017

Insulation manufacturer to build \$150 million plant in Ranson creating 150 jobs

“Roxul, which makes stone wool insulation, decided the Ranson site was the best after reviewing a number of other sites for its second North American plant, Ranson City Manager Andy Blake said.”

Roxul plans to use 130 acres of the site to build its plant.

Jefferson County Development Authority
July 6, 2017

Roxul Will Build Manufacturing Plant in Jefferson County

Governor Jim Justice announced today that Roxul will build a \$150 million manufacturing plant in the city of Ranson, Jefferson County.

ROXUL plans to build a 463,000-square-foot manufacturing facility on an estimated 130 acres on the Jefferson Orchards site in Jefferson County.

The screenshot shows the MetroNews website with a banner for 'JUST SLOW DOWN! WORK ZONE SAFETY IS EVERYONE'S RESPONSIBILITY'. The main article headline is 'Insulation manufacturer to build \$150 million plant in Ranson creating 150 jobs'. Below the article is a 'PatientLink' advertisement and a 'Let It Go...' advertisement. At the bottom of the screenshot is the JGDA website with the headline 'ROXUL Will Build Manufacturing Plant in Jefferson County' and a 'Call (304) 728-3255' button.

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Recent News

- **Jefferson County Commission Approves \$150 Million Manufacturing Plant in Ranson**
- **Southwest Virginia Community College Announces New Location**
- **Johnstown High School Announces New Location**
- **Johnstown High School Announces New Location**
- **Johnstown High School Announces New Location**

ROXUL Will Build Manufacturing Plant in Jefferson County

July 6, 2017
 Governor Jim Justice announced today that ROXUL will build a \$150 million manufacturing plant in the City of Ranson, Jefferson County. Upon completion, the plant is expected to create up to 150 jobs with positions ranging from management level to the production level.

ROXUL, Inc. is part of the ROCKWOOL Group, North America's largest producer of stone wool insulation. The West Virginia facility will be the second facility ROXUL has opened in the United States. "West Virginia welcomes ROXUL as the newest international member to join our business community," said Governor Justice. "This achievement is the result of the outstanding teamwork between ROXUL, our Development Office, the Jefferson County Development Authority, Jefferson County Commission, and the City of Ranson."

"The Mountain State is pleased to add ROXUL to the growing list of international companies investing in West Virginia," said Secretary of Commerce H. Wood Thatcher. "ROXUL's expansion to West Virginia is a testament to the state's global competitiveness and presents a great opportunity for West Virginia's high quality workforce."

"We want to thank the State of West Virginia, the City of Ranson, and the Jefferson

The Journal
September 7, 2017

Ranson preps for \$15 million in infrastructure

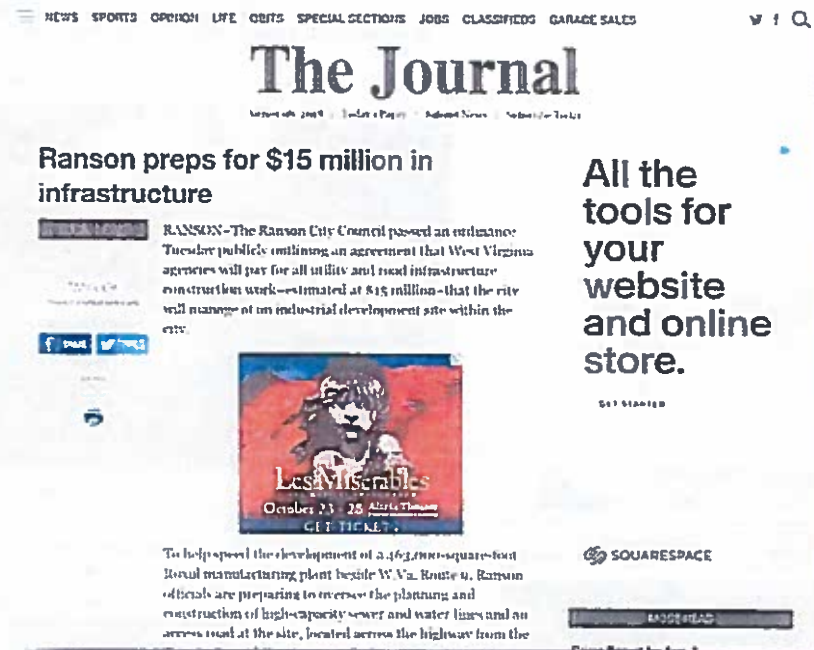
Roxul is preparing to purchase 130-acre site to construct the "rockwool" insulation plant at the orchard, which encompasses 400 acres of undeveloped land in Ranson. The Denmark-based company plans to start manufacturing residential and commercial insulation products starting in 2020 with about 120 to employees.

West Virginia Executive
October 26, 2017

ROXUL Inc. Rebrands to ROCKWOOL

ROXUL Inc., the North American division of the ROCKWOOL GROUP, the world's largest stone wool manufacturer, announces it will commence a full rebrand to ROCKWOOL.

Since 2014, the ROCKWOOL Group has invested some \$350 million in three new North American manufacturing facilities, including a recently announced stone wool plant in Ranson, West Virginia.



The Shepherdstown Chronicle

November 24, 2017

Roxul officials share plans with Chamber

Officials with Roxul, a Denmark-based corporation set to open a facility in Ranson, met with members of the Jefferson County Chamber of Commerce on Nov. 16 to provide a bit of history of their company, as well as a look ahead at what is in store for Ranson and Jefferson County.

The screenshot shows the website for The Shepherdstown Chronicle. At the top, there is a navigation bar with links for 'Sign In', 'Create an Account', 'Subscribe', 'Submit News', and 'Home'. Below this is a banner for 'A BURST OF SOMETHING NEW' with a 'Buy Now' button. The main navigation bar includes 'Your Community', 'News', 'Sports', 'Opinions', 'Ads', 'Affiliated Sites', and 'Contact Us'. The article title is 'Roxul officials share plans with Chamber', dated 'WEDNESDAY, NOVEMBER 22, 2017'. The author is 'Terri McBoome'. The article text describes a meeting between Roxul officials and the Jefferson County Chamber of Commerce on Nov. 16. It mentions that Roxul is a world leader in noncombustible stone wool insulation products and that the new facility in Ranson will provide up to 150 jobs. A photo shows a meeting table with a laptop and documents. A sidebar on the left lists 'Local News' and 'SUBMIT News'. A vertical banner for 'LES MISERABLES' is on the left. A search bar and 'News, Blogs & Events' section are on the right. A 'Click' button is also visible.

The Shepherdstown CHRONICLE

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Roxul officials share plans with Chamber

WEDNESDAY, NOVEMBER 22, 2017
Terri McBoome - For the Chron. Cl., The Shepherdstown Chronicle

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CHARLES TOWN: - Officials with Roxul, a Denmark-based corporation set to open a facility in Ranson, met with members of the Jefferson County Chamber of Commerce on Nov. 16 to provide a bit of history of their company, as well as a look ahead at what is in store for Ranson and Jefferson County.

Vice President Peter Regenber was joined by Leslie McLaren, communications and government affairs manager for the company, as they explained how Roxul decided to locate in this area. Roxul, they shared, is a world leader in noncombustible stone wool insulation products. The plant coming to Ranson will be located on the former Jefferson Orchard property off old W.Va. 9. The 150-acre parcel will house a plant that will provide up to 150 jobs for individuals in the area.

Regenber explained that all products are generated from rock. The product, he said, provides passive fire protection because it does not burn.

Article Photos

Chronicle photo by Terri McBoome

The parent company, Rockwool International, is headquartered in Denmark with a North American headquarters in Ontario, Canada. The company operates 28 factories on three continents. In North America, Roxul is the leading manufacturer of stone wool insulation

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**The Spirit of Jefferson
November 22, 2017**

Roxul crosses globe to connect with area leaders

Peter Regenberg, vice president of U.S. operations for Roxul USA, Inc., said

"the county's work force, its available land and proximity to major metropolitan areas along the northeastern seaboard gave it the edge."

Regenberg offered up a presentation of the company's plans last week during back-to-back meetings over two days with the Jefferson County Chamber of Commerce and area elected leaders.



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Roxul crosses globe to connect with area leaders

Story Image (2) 100 100 100 100

Published: November 22, 2017 3:00 pm

Robert Snyder 0 comments

RANSON - When one of the world's leading insulation manufacturers set out to expand its presence in North America, the company sent out proposal requests to 500 communities throughout the U.S. before selecting Jefferson County from among a list of 20 places.

Peter Regenberg, vice president of U.S. operations for the county's work force, its proximity to major metropolitan areas and available land gave it the edge.

The corporation is already being prepared to construct only its first factory in North America, a \$150-million plant on 130 acres at the Ranson site.

The presentation of the company's plans to local leaders during back-to-back meetings over two days with the Jefferson County Chamber of Commerce and area elected leaders.

The Danish-based company's U.S. operations will be based in Ranson, the company said.

Manager **Lester McLaren** said the company is part of an effort to land name-brand manufacturing in the county.

The global community is looking for the two-day presentation.

Currently, Roxul has plants in North America and in Canada and a manufacturing plant in China.

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Calendar

The Journal
February 17, 2018

BRCTC works with Roxul on training program

Blue Ridge Community and Technical College officials have begun talks with Roxul – the Danish company that will open a \$150 million plant in Ranson by 2020 – to develop industrial training programs for its plant employees, a BRCTC official told the college’s Board of Governors Wednesday.

Roxul officials will begin scouting for about 150 workers from the Eastern Panhandle next year, officials said. Those jobs will include an estimated 30 managers and supervisors as well as about 120 front-line skilled trade workers, some of whom will run highly specialized machines.

The Journal

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BRCTC works with Roxul on training program



MARTINSBURG — Blue Ridge Community and Technical College officials have begun talks with Roxul — the Danish company that will open a \$150 million plant in Ranson by 2020 — to develop industrial training programs for its plant employees, a BRCTC official told the college’s Board of Governors Wednesday.



BRCTC officials have met with Roxul vice president of U.S. operations and are scheduled to meet again March 8, according to Dr. Ann Shipway, director of economic and workforce development at BRCTC.

Roxul has selected an old apple orchard in the city of Ranson as its home for a new 463,000-square-foot manufacturing plant that will produce high-performance industrial insulation and bring about 150 new jobs to the city and Jefferson County.

Roxul plans to construct its plant on about 130 acres in the old Jefferson Orchards site along W Va 0 in Ranson, city and county officials announced. The coming plant will produce fire-resistant “stone wool” insulation for buildings, including customized products such as acoustic ceilings, company officials said.

Roxul executives were give a tour of BRCTC’s technical learning center at Tabler Station, Shipway said.

“We will be training them,” Shipway said.

Roxul officials will begin scouting for about 150 workers from the Eastern Panhandle next year, officials said. Those jobs will include an estimated 30 managers and supervisors as well as about 120 front-line skilled trade workers, some of whom will run highly specialized machines.

Roxul is looking to hire workers sometime in 2019, officials said. To be fully operational by first quarter of 2020, the plant will manufacture residential and “stone wool” insulation products for distribution and sale.

Roxul’s products are manufactured from a combination of natural basalt rock and recycled slag. Those materials, combined with technology, produce a mineral wool insulation product that is both effective and environmentally friendly, according to the company.

Part of the Rockwool Group, the company part of Rockwool International, the world’s largest producer of mineral wool insulation with over 23 facilities in 14 countries.

BRCTC has already developed training programs for Procter and Gamble, Potomac Edison, and most recently Logoplaste and Technimark — manufacturers of plastic bottles and bottle closures, respectively, to be used with products made at the Procter & Gamble manufacturing plant.

PRG’s \$500 million manufacturing plant at Tabler Station Industrial Park is slated to open Feb. 14.



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The Journal
April 30, 2018

Rockwool plant in Ranson on track for June groundbreaking

The 460,000-square-foot Rockwool plant on 136 acres – the first industrial project planned for a 400-acre former orchard near W.Va. 9 – is on track for its targeted opening in the first quarter of 2020," said Leslie McLaren, a spokesperson for the Danish-owned company.



The Journal

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Rockwool plant in Ranson on track for June groundbreaking

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Trucks with heavy equipment at the Rockwool site in Ranson, W. Va. The site is located on a cleared 136-acre plot near W.Va. 9.

RANSON—Trucks are scurrying to clear and grade the land at the new Ranson industrial site, but a formal groundbreaking to begin the construction of a \$150 million insulation facturing plant there is planned for June.



A 460,000-square-foot Rockwool plant on 136 acres — the first industrial project planned for a 400-acre former orchard near W.Va. 9 — is on track for its targeted opening in the first quarter of 2020, said Leslie McLaren, a spokesperson for the Danish-owned company.

The company is looking to hire workers sometime in 2019 to prepare for its plant to be fully operational by first quarter of 2020. Once fully operational, the plant will eventually operate 24 hours a day, McLaren said.

The company expects to announce sometime in late May or early June the contractor it has to build the Ranson plant at the city's far northeastern end, she said.

Rockwool's "mineral wool" insulation products are manufactured from a combination of basalt rock combined with recycled slag, which is produced as a byproduct from mining operations. Those stone materials are melted in an industrial furnace into a super-heated liquid form, which is cured with different densities to produce different kinds of fire-resistant insulation material for homes and businesses.

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**Jefferson County
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June 28, 2018

**Rockwool Breaks
Ground for
Manufacturing Facility
in Jefferson County,
West Virginia**

Rockwool North America officially broke ground Tuesday for a new stone wool insulation facility in Jefferson County, which will be the company's second plant in the United States.

More than 120 people including Rockwool executives, government officials and community leaders attended the ceremonial groundbreaking.



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Recent News

Jefferson County Development Authority Address by

Rockwool Breaks Ground for Manufacturing Facility in Jefferson County, West Virginia

June 28, 2018

Rockwool North America officially broke ground Tuesday for a new stone wool insulation manufacturing facility in Jefferson County, which will be the company's second plant in the United States.



Along with Rockwool executives, community leaders attended the ceremony. With site preparations already completed, the new 130,000 square foot manufacturing plant is being constructed on approximately 130 acres in the Ormonds site in Ranson. When completed, about 150 people in positions of responsibility will be employed at the more than \$150 million facility.

Presenting were Trent Ogilvie, president of Rockwool North America, Jens Bergerson, CEO of Rockwool Group, U.S. Sen. Joe Manchin, chief of staff to West Virginia Gov. Jim Justice, Mayor Jim Diehl of the City of Ranson, and Nicolas H. Diehl, Jefferson County Development Authority.



The demand for its stone wool insulation continues to grow in the United States, along with the company's strategic location in the mid-Atlantic region. "Selecting Jefferson County for the company's expansion in the United States is a great honor to say 'Hello Jefferson County.' We have really been looking forward to this new growth. This factory is a big part of that continued growth."

Jefferson County. "We are grateful that after an extensive search, Rockwool chose our county for their new plant," Diehl said. "A year ago this was a big field. Today, it has found a purpose, one that will build our economy for decades to come."

Rockwool's manufacturing facility in Mississippi and was impressed with the company's community involvement, when has already begun in Jefferson County. "The equipment, the size of the plant, and the focus on a safe, healthy work environment gave us the confidence that Rockwool North America is exactly the kind of company we want to have here. They understand what it means to be a great community steward. We are excited to be a part of this project."

This was a collaborative effort and Diehl recognized some of those who helped make this possible: West Virginia Department of Commerce Development Office, Gov. Jim Justice, West Virginia Department of Highways, West Virginia Department of Jefferson County Commission, City of Ranson, Charles Town Utility Board, Ranson Fire Department, Jefferson Utilities, Mountaineer Gas, First Energy Potomac and many others.

The Jefferson plant will proceed earnestly now with erection of the factory buildings. Installation of the equipment planned for 2019, and the facility will begin in the first quarter of 2020. The new line of Rockwool stone wool insulation, acoustic ceilings,



APPENDIX 02

ROCKWOOL press release, announcing
the choice of Jefferson County as the location for
its North American expansion

July 6, 2017

ROCKWOOL to build multi-million dollar manufacturing facility in West Virginia, USA

JULY 06, 2017



Construction is expected to begin in October this year on the 130 acre site in the City of Ranson, with initial production of ROCKWOOL's stone wool insulation slated to begin in the first quarter of 2020. With a total investment exceeding USD 150 million, the new manufacturing facility will cover some 43,000 square meters and employ around 150 people in positions ranging from management levels to the production line.

The Jefferson County production facility will add to the ROCKWOOL Group's already strong presence in North America, where the company has existing manufacturing sites in Marshall County, Mississippi as well as Milton, Ontario and Grand Forks, British Columbia. Further production recently began for ROCKWOOL's acoustic ceiling tile subsidiary Rockfon, at a new production line in Mississippi.

ROCKWOOL Group President and CEO Jens Birgersson comments, *"We aim to continue double-digit growth in the United States, and this new factory will play a major role in ensuring we meet the growing customer demand for non-combustible stone wool insulation in this market."*

Trent Ogilvie, President of ROXUL, the ROCKWOOL Group's North American subsidiary adds, *"This new production site places us close to major population centers in the northeastern, mid-Atlantic, and*

Ogilvie continues, "We want to thank the State of West Virginia, the City of Ranson, and the Jefferson County Development Authority for the very good collaboration on this significant investment, which will create well-paying jobs for around 150 people. We're excited to become part of the local business community in Jefferson County."

The official groundbreaking is expected in October. Today's announcement is a follow-up on the ROCKWOOL Group's 24 February 2017 statement announcing its intention to purchase land for capacity expansion in the United States, Sweden, and Romania.

About the ROCKWOOL Group

At the ROCKWOOL Group, we are committed to enriching the lives of everyone who experiences our product solutions. Our expertise is perfectly suited to tackle many of today's biggest sustainability and development challenges, from energy consumption and noise pollution to fire resilience, water scarcity and flooding. Our product range reflects the diversity of the world's needs, while supporting our stakeholders in reducing their own carbon footprint.

Stone wool is a versatile material and forms the basis of all our businesses. With approx. 10,500 passionate colleagues in 38 countries, we are the world leader in stone wool solutions, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibres for industrial use to insulation for the process industry and marine & offshore.

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Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

APPENDIX 03

Jefferson County Development Authority blog post,
Detailing ROCKWOOL's decision to build in
Jefferson County, WV
July, 2017

ROXUL Will Build Manufacturing Plant in Jefferson County

JULY 06, 2017

Governor Jim Justice announced today that ROXUL will build a \$150 million manufacturing plant in the City of Ranson, Jefferson County. Upon completion, the plant is expected to create up to 150 jobs with positions ranging from management level to the production line.

ROXUL, Inc. is part of the ROCKWOOL Group, North America's largest producer of stone wool insulation. The West Virginia facility will be the second facility ROXUL has opened in the United States. "West Virginia welcomes ROXUL as the newest international member to join our business community," said Governor Justice. "This achievement is the result of the outstanding teamwork between ROXUL, our Development Office, the Jefferson County Development Authority, Jefferson County Commission, and the City of Ranson."

"The Mountain State is pleased to add ROXUL to the growing list of international companies investing in West Virginia," said Secretary of Commerce H. Wood Thrasher. "ROXUL's expansion to West Virginia is a testimony to the state's global competitiveness and presents a great opportunity for West Virginia's high-quality workforce."

"We want to thank the State of West Virginia, the City of Ranson, and the Jefferson County Development Authority for the very good collaboration on this significant investment, which will create well-paying jobs for around 150 people. We're excited to become a part of the local business community in Jefferson County," said Trent Ogilvie, president of ROXUL, the ROCKWOOL Group's North American subsidiary.

ROXUL plans to build a 463,000-square-foot manufacturing facility on an estimated 130 acres on the Jefferson Orchards site in Jefferson County. The plant will produce stone wool insulation for building insulation, customized solutions for industrial applications, acoustic ceilings, and other applications.

"We are very excited about this project," said Eric Lewis, president of the Jefferson County Development Authority. "It was the result of

"We are delighted that ROXUL has selected the City of Ranson for its multi-million dollar investment and high tech manufacturing facility," said Ranson Mayor Duke Pierson. "This investment will provide many high-quality jobs, expand infrastructure for future development, and broaden our tax base. We look forward to working with ROXUL as it transitions to the construction phase."

"Jefferson County is trilled to welcome ROXUL to our beautiful county," said Peter Onoszko, president of the Jefferson County Commission. "The decision on the part of ROXUL to locate a major production operation here will benefit the county in many ways above and beyond the obvious economic benefit. I would also like to recognize the tremendous effort on the part of both our state and county development authorities in bringing this to pass. Job well done to all!"

An official groundbreaking will take place in October 2017, and construction is expected to be completed by early 2020.

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APPENDIX 04

Jefferson County Development Authority blog post
Announcing ROXUL rebranding to ROCKWOOL
September, 2017

Roxul Rebrands to Rockwool

SEPTEMBER 07, 2017

ROXUL Inc., the North American division of the ROCKWOOL Group, the world's largest stone wool



manufacturer, announces it will commence a full rebrand to ROCKWOOL. The ROCKWOOL brand has been marketed proudly and internationally for 80 years and now will be adopted in North America.*

The rebrand takes effect January 1, 2018, and will apply to all segments of ROXUL's North America insulation business--residential, commercial, roofing, OEM (core solutions) and technical insulation (industrial, marine & offshore)--as well as all product lines.

The new ROCKWOOL branding will soon be integrated into all products, marketing materials, digital and social channels throughout North America. The company's new manufacturing facility in Jefferson County, West Virginia--announced by ROXUL Inc. in early July--will now open and operate under the ROCKWOOL name.

"ROXUL is soon to be ROCKWOOL in North America," says Trent Ogilvie, President, ROXUL Inc. "The rebrand creates a unified identity for our company, its solutions and benefits on a global scale. It reinforces ROCKWOOL's position as a world leader in a diverse range of stone wool solutions, while unlocking significant potential for our business."

The rebrand will allow ROXUL to better leverage the ROCKWOOL Group's longstanding leadership position in the international insulation marketplace.

The rebrand will make possible a multitude of advantages--some of which have already been evident. These include continued strong investment to support further growth and improved infrastructure across all regions. Since 2014, the ROCKWOOL Group has invested some \$350 million in three new North American manufacturing

solutions and service, stronger marketing muscle, exceptional employee engagement and training, expanded education initiatives, and industry research.

The evolution to ROCKWOOL is a natural step. It follows an April announcement from the ROCKWOOL Group that all its global subsidiaries have assumed a new, cohesive brand identity. This marked the introduction of the ROCKWOOL symbol--a graphic representation of a volcano--as well as a new purpose statement that conveys a singular, overarching goal for all ROCKWOOL companies: release the natural power of stone to enrich modern living.

"This North American transition marks the next step in our efforts to create a strong global brand," says Jens Birgersson, ROCKWOOL Group CEO. "The North American market continues to grow in importance, and the rebranding will strengthen our ability to meet customer requirements while at the same time addressing global concerns around energy consumption, water shortages and the need for safer, more resilient cities."

**The rebranding applies to the North American insulation business. Rockfon and Grodan will continue to operate under their respective brand names.*

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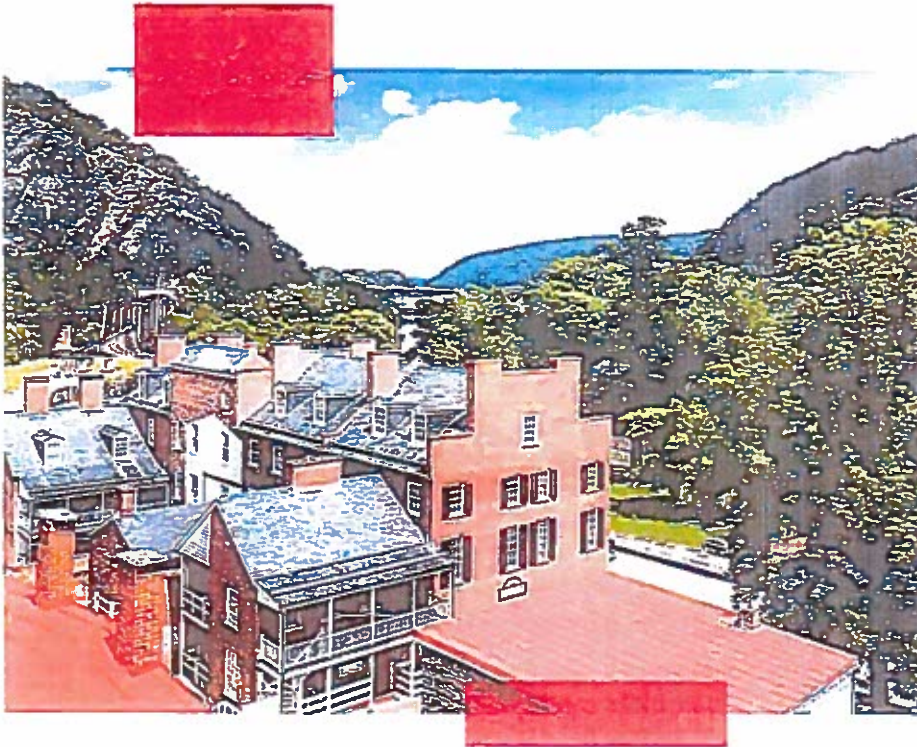
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APPENDIX 05

ROCKWOOL information pamphlet
distributed to residents of Ranson,
October 2017





We're building a new home in Jefferson County. And we're proud to be your neighbor.

ROXUL – part of the ROCKWOOL Group – is thrilled to build a brand-new, state-of-the-art facility in Ranson. It's a \$150 million investment, and it will expand our ability to meet the growing needs of our customers.

ROXUL is the world's largest stone wool insulation manufacturer, and we're excited to become part of this community.

During the past year, we've visited and explored the Panhandle. The welcome we've received has been inspiring. It's become obvious – selecting West Virginia as our new home was the perfect choice. Thank you.

It's not just an investment in ROXUL – it's an investment in this community. Once we're fully operational, the facility will employ about 150 folks from this region. That's 150 new jobs. That's a boost for the local economy. And it's incredibly rewarding.

Part of the ROCKWOOL Group



Part of the ROCKWOOL Group

A New Chapter

Starting January 1, we will be doing business as ROCKWOOL. It's a major milestone in our 80-year history, and Ranson will be an important part of our family.

ROCKWOOL will continue to be the world's leader in stone wool solutions. We will continue to deliver superior quality and performance. Our vision remains creating value for our customers as they address the challenges of modern living. Our commitment to delivering product solutions, innovation, education and market growth to our customers will be just as strong.

With the help of this community, we'll strive to enrich the lives of those around us.

We're happy to answer your questions.

ROXUL is committed to sharing information about this project with our new neighbors throughout the entire process. If you have a question, don't hesitate to contact us.

Leslie McLaren, NA Manager, Government Affairs & Corporate Communications

800.265.6878 ext 4307

905.875.9307

leslie.mclaren@roxul.com

APPENDIX 06

Adams Family Correspondence
September/October 2017

City of Ranson City Council
City of Ranson Planning Commission
Maria Dula, Associate Planner
City of Ranson Department of Community Development
Leslie McLaren, North American Communications Manager, Roxul US

September 28, 2017

Dear Elected Officials, City Staff & Leslie McLaren,

Our family owns Hazelfield Farm, the property immediately to the east of the Jefferson Orchards property which has been incorporated into Ranson. Hazelfield is listed on the National Register of Historic Places as well as documented by the Historic American Building Survey preserved in the Library of Congress.

We understand the importance to the community to have thoughtful, well-planned growth and we applaud the City of Ranson for their efforts to preserve a balanced environment where economic development is paired with the preservation of our truly exceptional and historic rural landscape. Our concerns are therefore related to preserving the peaceful and beautiful character of areas that remain agricultural, including ours.

Here are our major concerns, all of which can be addressed without creating a hardship:

1. Sound
 - A. The Roxul plant will operate 24 hours a day and will presumably have trucks entering and leaving at all hours. The noise from these trucks will spread and amplify in the open landscape. We request that the Eastern edge of the Roxul property be stagger-planted with dense evergreens and, if possible, bermed to provide sound mitigation. This would benefit all of the neighbors to the east of the plant as well as the future residents of the proposed mixed-use community proposed for the eastern portion of the Orchards Property.
 - B. The plant will presumably operate at the same noise levels as the Mississippi plant. There are no sound-mitigation notes of any kind on the documents that we have seen. We ask that the City of Ranson develops a criteria for limiting noise pollution if it does not already have one; and ask that Roxul agrees to limit sound pollution and, if it is too loud (per agreed-upon city-defined limits) once the plant is built and operating, that Roxul will provide whatever additional abatement is required to cure excessive sound and bring it down to the required "as yet to be specified" limits.

Mary Adams Chatham
Walter Chatham



October 5th, 2017

William Howard Adams
Sarah Woodbury Adams
William Stephen Adams
City of Ranson City Council
City of Ranson Planning Commission
Maria Dula, Associate Planner
City of Ranson Department of Community Development

Dear Adams family and honorable Jefferson County officials,

Thank you for the time and care you put into your letter of concern. We have a long history of not only meeting but exceeding federal, state and local environmental regulations; our newest plant will be no different. After spending much time in the Jefferson County area, we know well how the peaceful and picturesque setting is cherished by residents and visitors alike. We also understand how important agriculture is to the region, and would never want to impede on another industry.

Based on our research, it appears that your property is a little more than half a mile away from our property, with a thick tree line between us. Your property also looks to sit below ours, and we believe that positioning will keep us out of your view.

Throughout the necessary regulatory steps, we will continue working with the relevant parties to ensure we remain good neighbors. We are part of the communities we build in, with ties to local charities and civic organizations. Our products are environmentally friendly, and their production is environmentally safe. We have several corporate policies we plan to enact at our Ranson facility, such as low-emissions forklifts and a no-idling policy for all vehicles. Your concerns about sound, lighting and color are certainly important to us, and as we complete the due diligence to begin plant construction, we will continue to review those requests as well as any others we may receive throughout the process.

Thank you again for taking the time to share your thoughts with us. We appreciate your understanding of the benefits we will bring to Jefferson County, and you have our word that we will continue to welcome input and update you and the community as we proceed. Sincerely,

Leslie McLaren
NA Government Affairs & Corporate Communications

October 9, 2017

Leslie McLaren,
North American Communications Manager
Roxul, US

Re: Roxul Plant, City of Ranson, WV

Dear Ms. McLaren,

Thank you for your letter of October 5th. We appreciate your prompt response and Roxul's history of meeting or exceeding environmental regulations particularly where, as here, the creation of the Roxul plant is such a significant and fundamental departure from the land use of all of its neighbors in the surrounding area.

I'd like to follow-up on a couple of points you make in your letter:

1. You say that the positioning of the Plant roughly 900 yards from our property, together with a thick tree line between the two, will keep the plant out of view. By our own calculations, while the 110'-tall Plant itself *may* be out of view, it appears that any chimneys or similar structures that exceed that height will be fully visible, along with any aviation warning lights that would be attached. And the heightened elevation of the Plant will serve to make it more visible – not less.

Has Roxul made its own study of the visibility of the Plant and the chimneys as they relate to surrounding properties that supports your belief that the Plant will not be visible? Has Roxul made every effort to limit the number and height of chimneys? And is the tree line that you refer to located on Roxul property, that it will agree to maintain, or is that not under Roxul's control and thus subject to potential removal?

2. In our letter of September 28, we raised concerns about noise and light produced by the Plant – especially a plant operating around the clock – and asked that Roxul both berm and heavily plant the eastern edge of its property, use darker paving and minimize the amount and intensity of the exterior lighting. This would benefit not only us but the future mixed-use community planned for the eastern portion of the Orchards Property. Apart from reviewing our request, is Roxul able to make any specific commitments on these issues to its new neighbors?

3. You mention that Roxul is undertaking due diligence before initiating construction of the Plant. We ask that you share with the community the due diligence you have undertaken with regard to the issues raised above.

We would greatly appreciate more specific responses to the issues raised in this and our earlier letter and hope that we can continue to have a productive dialogue with you and with

Oct. 17, 2017

William Howard Adams
 Sarah Woodbury Adams
 William Stephen Adams
 Mary Adams Chatham
 Walter Chatham

Dear Adams and Chatham family members,

We appreciate the opportunity to continue the dialogue with you about our presence in the Eastern Panhandle. We want everyone in the community who has questions about our planning and construction to seek information.

The permits we're required to operate under are all public record. A comprehensive site plan application was filed in July 2017. Both a Smart Code Rezoning Application and a Smart Code Land Development Plan were filed in June 2017 for the Granny Smith Lane Project. All these submissions were publicly filed and subject to public comment periods and approval by the city's Planning Commission in open session. We have been and will continue to be as transparent as possible throughout our planning and construction process as we respectfully follow all the necessary regulations. Having said this, we would like to answer your questions about stack heights, property barriers, noise and additional items you've referenced in the previous correspondence.

The height of our stacks is based on the need to meet West Virginia Department of Environmental Protection (DEP) regulations. Higher stacks are more expensive, but they also are much better for the environment. We are using state-of-the-art equipment to ensure our emissions meet and exceed all applicable regulations and make no adverse impacts on the environment, but our stacks must be of sufficient height to allow us to meet the DEP's emission requirements, and any regulations for aviation safety.

We believe the land where the tree line is currently located, bordering your property, is owned by Jefferson Orchard. We will be purchasing 130 of the 400 available acres at the Jefferson Orchard site; the county, in connection with the the project, will bring all the necessary infrastructure (water, sewage, electricity) to this area, which will help support future economic development.

Moving dirt to make berms is a significant undertaking. It is not a requirement of the project and is therefore not one we have planned for. The soil at the site is necessary for site leveling, and constructing berms would disturb the balance required for site leveling. We are required by the Jefferson County Planning Commission to plant trees, which we have no issues with and will do at the appropriate time during the project. We will be glad to go beyond the requirements of the county and increase the number of plantings. Our exterior building scheme is typically a lighter shade because it's easier to maintain; over time, it will look cleaner, which we know our neighbors will appreciate in the long run. We will ensure that an eggshell/non-reflective finish is used to eliminate any possibility of glare from the building.

APPENDIX 07

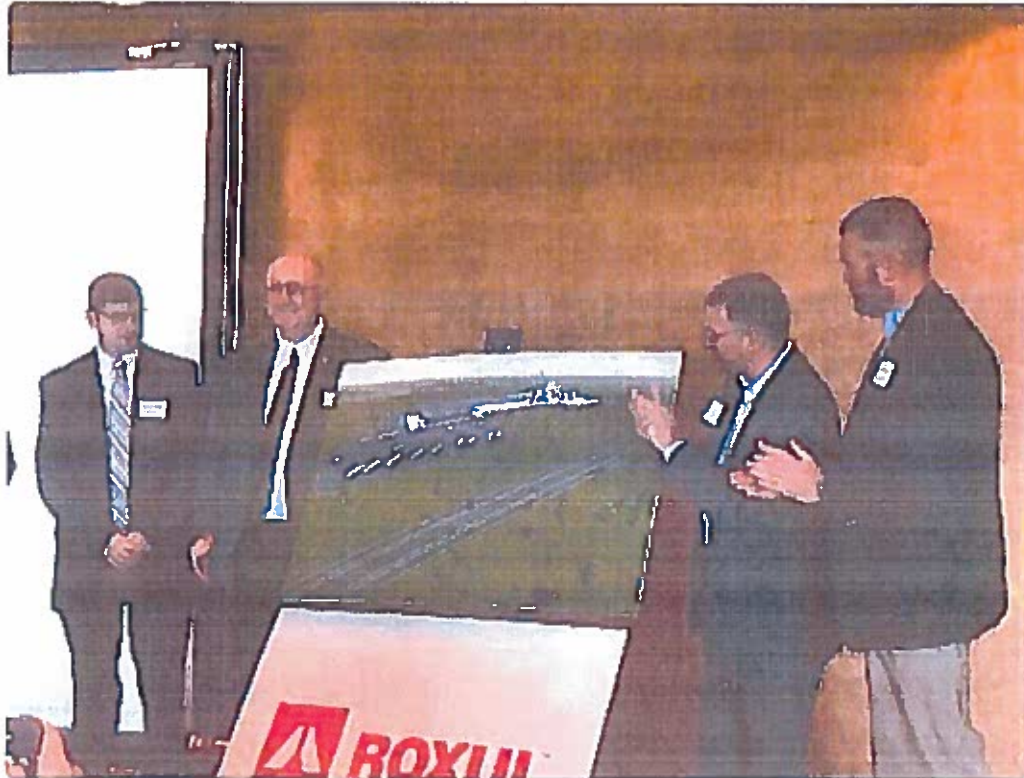
Supportive tweet by former
Charles Town Mayor Scott Rogers
November 2017





Scott Rogers @ScottRogers_WV · 17 Nov 2017

@Roxul, a big thank you for coming to Ranson, WV. Your project represents economic progress for the whole Jefferson County, WV community!
#JeffersonStrong #Roxul #Ranson #CharlesTown #WestVirginia



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Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

APPENDIX 08

Article in local newspaper, *Spirit of Jefferson*,
Covering the unveiling of the rendering
of the ROCKWOOL factory
November 2017

Roxul crosses globe to connect with area leaders

ROBERT SNYDER NOVEMBER 22, 2017



RANSON – When one of the world's leading insulation manufacturers set out to expand its presence in North America, the company sent out proposal requests to 500 communities throughout the U.S. before selecting Jefferson County from among a list of 20 places.

Peter Regenberg, a vice president of U.S. operations for Roxul USA Inc., said the county's work force, its available land and proximity to major metropolitan areas along the northeastern seaboard gave it the edge.

Regenberg said site work preparation is already being done where the company plans to construct a new four-million-square-foot manufacturing facility.

Regenberg offered up a presentation of the company's plans last week during back-to-back meetings over two days with the Jefferson County Chamber of Commerce and area elected leaders.

The move by the 80-year-old Denmark-based manufacturer to expand its operations coincides with a re-naming of the Roxul brand name to Rockwool, the name it is known by in Europe.

Roxul communications manager Leslie McLaren said the name change was part of an effort to lend name recognition to the international brand.

"Roxul has always been part of Rockwool ... but with the investment and the scope of the global community it makes sense to operate under one unified name," said McLaren, who joined Regenberg for the two-day presentation by the company last week.

The West Virginia plant will be only the company's second big foray into the United States. Currently, Roxul has three stone wool facilities in North America – two in Canada and a Mississippi site that opened in 2014.

Rockwool operates facilities in 38 countries throughout Europe and Asia and employs about 10,800 workers, with the company earning about \$2.3 billion in sales worldwide. Regenberg said the company located its first facility in Canada in 1988, as part of a move to situate itself into a smaller North American market before expanding into the U.S.

The Ranson plant will make insulation for homes and residences for the company's growing northeastern market, Regenberg said. "We are locating our production capacity where people live or are at least close," he said. "We want to be close to our customers."

Regenberg said the facility is scheduled to open in early 2020 and the company expects to hire 150 employees for the plant, about 30 of them managers and supervisors.

He said the company will begin hiring five to 10 salaried employees early in 2018 and will host job fairs for hourly workers starting in 2019. The company has already set up an off-site headquarters in Bardane to prepare for construction of the site, Regenberg said.

"There are a lot of opportunities for the local community. We are counting on local work force development," said Regenber, who said the company will require new hires to undergo extensive training at its other facilities, either in Mississippi, Canada or Europe.

He said training is intensive because the company has developed its own processes and manufactured its own machinery for melting mined basalt rock and recycled slag metal into molten lava before cooling it into fibrous material.

"A lot of the production equipment is proprietary," he said. "We don't buy machines like all of our competitors from external suppliers that are generic machines. We have engineered and manufactured our own production equipment and that is what makes us one of the biggest companies in the world doing what we are doing."

Besides insulation, Rockwool also manufactures a host of other products for residences and commercial buildings, including ceiling tiles, interior wall sound-dampening panels and mats for reducing vibrations.

Regenber said the company hopes to sign an agreement with the contractor to build the facility sometime between January and March. The company has also begun scouting out quarries to begin from which to harvest its raw materials. Regenber said the company will consider mining operations as far away as 200 miles.

"We've started that work just now and it usually take a year and a half for us to find that right rock. The chemistry has to be very specific," Regenber said.

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APPENDIX 09

Follow-up ROCKWOOL information pamphlet
Distributed to residents of Ranson
January 2018



Hello Jefferson County



Proud to be in Almost Heaven

We support local charities.

Our insulation products may be best known and sought for buildings and people, but it's our commitment to our communities that builds the essential foundation. Supporting causes that make a difference in our community is important to us.

ROCKWOOL recently sponsored the 2nd annual Christmas for Charities, helping the Rotary Club of Charms. From new thousands of dollars to local charities. The list also supported the Ranson Fire-Lighting Committee, which includes the Fire Dept. Thank for help.

And we are just getting started.

We believe in protecting the environment.

ROCKWOOL products are non-toxic, non-combustible, made with natural rock and recycled slag. Any production waste we create in our factories is recycled or sent to waste plants to be reused.

Recycling and waste reduction are vital areas of our environmental policies, which also include reducing greenhouse in our manufacturing processes, using the most from our process to help build the factory and community, using modern energy systems, recycling all paper, and a no-idling policy.

Our production line is built with state-of-the-art technology that provides the most effective process in plant operations. When we are in line with the EPA's air quality standards, we are proud to exceed and surpass all local standards.



A new chapter in Ranson

Let's face it we were known as ROCKWOOL and our products had always contributed to the energy efficiency of homes. As of January 1, we are doing business as ROCKWOOL, and that legacy continues. With the world's energy consumption expected to rise 50% by 2020, we can address that rising need with sustainable solutions. It's a bold leap forward and a major milestone in our 25 year history. Ranson is an important part of our future.

ROCKWOOL will continue to be the world's leader in stone wool insulation. We will continue to deliver superior quality and performance. Our stone wool is a natural fire and sound barrier, address the chief goals of modern living. Our commitment to delivering products that protect, insulate, and make your life just as easy.

With the help of the community, we'll strive to reach the goals of these goals.

We're happy to answer your questions.

ROCKWOOL is committed to sharing information about the products that our new employees, the world's most experts. If you have any questions, please contact us.

145 W. 100th, 114th St. Ranson, WV 26055
708.715.4321 ext. 4000
708.715.4322
www.rockwool.com

Learn more at www.rockwool.com



During the past year, we've worked and explored the plan and a. The welcome we've received has been incredible. It's become obvious - selecting West Virginia as our new home was the perfect choice. ROCKWOOL is the world's largest stone wool insulation manufacturer, and we're proud to become part of this community.

The ROCKWOOL family is excited to build a business, state-of-the-art facility in Ranson. It's a \$130 million investment, and it will expand our ability to meet the growing needs of our customers.

But it's not just an investment in ROCKWOOL - it's an investment in the community. Once we're fully operational, the facility will employ about 120 folks from the region. That's 120 new jobs. That's a boost for the local economy. And it's incredibly rewarding.

Bi-fold Brochure

APPENDIX 10

ROCKWOOL press release, detailing the
Groundbreaking at the Ranson site
June 26, 2018

ROCKWOOL (North America) breaks ground on new stone wool manufacturing facility in Ranson, West Virginia

JUNE 26, 2018



RANSON, WV (June 26, 2018)—ROCKWOOL (North America) officially broke ground today on its second stone wool insulation manufacturing facility in the United States, located in Ranson (Jefferson County), West Virginia.

Senator Joe Manchin and Mike Hall, Chief of Staff to Governor Jim Justice, were in attendance to celebrate the milestone with ROCKWOOL executives, including Jens Birgersson, President and CEO of the global ROCKWOOL Group; customers; industry stakeholders; and community leaders. The new 460,000 sq. ft. facility represents an investment exceeding US\$150 million and will employ around 150 people in positions ranging from management to the production line.

“This is an exciting time for ROCKWOOL Group,” says Birgersson. “Solid customer demand and strong market growth in the United States and elsewhere reflects the reality that people are increasingly discovering the quality and advantages of our stone wool solutions. This is our second factory in the United States, which positions us well for future growth.”

“The demand for stone wool insulation remains on the upswing in the United States, fueled by forward-thinking builders, architects,

growth and innovation.”

“Today’s groundbreaking is a result of the collaborative efforts of ROCKWOOL, our Development Office, the Jefferson County Development Authority and the City of Ranson to establish ROCKWOOL as a new and positive presence in our business community,” says Governor Jim Justice. “This underscores West Virginia’s commitment to bring a diverse range of industry to our state. We’re proud to attract quality employers like ROCKWOOL who provide well-paying jobs that make a difference to families in West Virginia.”

ROCKWOOL continues to work closely with the State of West Virginia, Jefferson County, the Jefferson County Economic Development Authority and the City of Ranson to ensure that the project is designed and constructed to meet or exceed building code and environmental standards. Construction has begun on the 130-acre site in the City of Ranson with site preparation already underway. Full production at the completed ROCKWOOL facility is expected to commence in Q1 2020. The facility will manufacture a full lineup of ROCKWOOL stone wool insulation products.

The Jefferson County, West Virginia production facility will add to the ROCKWOOL Group’s already strong presence in North America, where the company has existing insulation manufacturing sites in Marshall County, Mississippi as well as Milton, Ontario and Grand Forks, British Columbia, Canada.

“ROCKWOOL is honored to be in West Virginia and to be part of the greater community in Jefferson County and the City of Ranson,” says Ogilvie. “We’d like to thank all those involved in making it possible. We invite the community to get to know us. As a company, we have a longstanding and proud record as a caring corporate citizen and community partner. We’ve been recognized as a top employer, and we’re invested in solutions that provide true global impact, offering important benefits to people, the built environment, and the planet.”

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APPENDIX 11

City of Ranson's July 27, 2018 public statement on community concerns, including "Ranson Approval Timeline and Public Meetings Timeline"



The City of Ranson is aware of various social media posts and news coverage regarding citizens' concerns regarding the new Rockwool manufacturing facility in our City and the impact to our community. We take these concerns seriously. After all, we are also residents that live here. At the same time, we are glad that Rockwool selected our City for its largest investment in its company's history. We have appreciated the professionalism of Rockwool's employees and its consultants as we have moved through the site selection and approval process. In order to try to balance of the interest of concerned citizens along with the private property rights of Rockwool we have asked Rockwool to directly engage with the community and citizens to answer your specific questions and concerns – and they have started that process. Rockwool has already provided additional information in response to the concerns. Rockwool's information is attached. And, Rockwool has designated Leslie McLaren at leslie.mclaren@ROCKWOOL.com to answer your specific questions. Ms. McLaren is the North American Manager for Corporate Communications & Stakeholder Relations and is aware of the concerns that have been raised.

A project of this magnitude touches many governmental agencies and regulators. This project is no different and has involved the efforts of many individuals and agencies over the course of thousands of hours over many months. This project has been a joint and cooperative effort of the West Virginia Development Office, Jefferson County Development Authority, City of Ranson, Jefferson County Commission and Jefferson County Board of Education. The cooperation and effort resulted in the private investment of almost \$200 million and will set up the Route 9 corridor with adequate infrastructure for future economic development projects.

The City of Ranson has a couple of roles with regard to projects: (1) promotion of economic development; and (2) ensuring certain regulations are met.

Promotion of Economic Development:

The Rockwool project began in the fall of 2016 when the Jefferson County Development Authority responded to Deloitte Consulting who is a site selection consultant. Deloitte was working on behalf of a confidential client (at the time) that was seeking to identify a community and a site to support a new state-of-the-art heavy manufacturing facility for consumer and industrial products. Deloitte's client (Rockwool) was planning to locate an operation that will require up to 150 full time employees and a capital investment of over \$140 million, with the potential for future expansion investments and additional labor needs. The Jefferson County Development Authority responded to the proposal with a couple of sites – including the site in Ranson. This “blind” Request for Proposal Process is a routine process that many large corporations use to select sites – including companies that have located within our region such as Proctor & Gamble, Macy's, Amazon and many others. Our community has competed for many of these same projects.

In January 2017, Deloitte visited Jefferson County along with its confidential client to visit a couple sites in Jefferson County. During that site visit, representatives from the City met with Deloitte and the client to explain the process and regulations for developing a site within the City. The client was still unknown at the time. Over the course of the next several weeks, the West Virginia Development Office, Jefferson County Development Authority and the City of Ranson continued to provide information that Deloitte requested to narrow down the site selection and inquired as to what incentives authorized by State statute that the State of West Virginia and local jurisdictions could provide if Rockwool selected to construct Jefferson County. Over the course of several months, the West Virginia Development Office spearheaded and negotiated a comprehensive economic development package using the tools available to promote economic development into West Virginia – including the extension of infrastructure for Rockwool and other properties along Route 9.

In the Spring of 2017, Rockwool notified the West Virginia Development Office, Jefferson County Development Authority and the City of Ranson that it selected the Ranson site at Jefferson Orchards. On July 5, 2017, Rockwool issued a press release announcing it was planning on constructing a facility in Ranson. Subsequently, Rockwool began the legal process of developing a site within the City of Ranson, obtaining necessary approvals from the City of Ranson and appropriate state agencies. No approvals were granted to Rockwool prior to its announcement on July 5, 2017.

Land/Building Regulations:

The City of Ranson also has the role of ensuring that land regulations and the Building Code adopted by the State of West Virginia are met when an individual and/or corporation wishes to develop. There is a process to develop and/or build that is set both by State and local regulations. The City is obligated to follow the process and does not have the authority to deny a project if the steps are followed. There are essentially 4 steps to developing land

within the City of Ranson: (1) consistency with Comprehensive Plan and appropriate zoning; (2) submission and approval of a land development plan; (3) submission and approval of a site plan with construction /engineering drawings; (4) submission and approval of a horizontal and vertical building permit. Pursuant to both State Code and local code, several of these steps include public hearings – which were advertised and held – and approvals all held in posted open sessions of the Planning Commission and/or City Council. Attached is a timeline of specific actions that were all discussed and voted on during open public sessions of the City's Planning Commission and City Council. During the last 16 months of the process, the City received one written letter as part of the record.

Rockwool has been issued a horizontal building permit for site work by Ranson and site work has started. Rockwool has not submitted its vertical building permit at this time and the City has not issued it. The purpose of the building permit is to ensure that the vertical building meets all the requirements of the State Building Code and that Rockwool has all of its required permits from other pertinent federal, state and local agencies and utilities.

Many of the concerns reported in the news media center around Rockwool's Clean Air permit. The City of Ranson does not have jurisdiction over air permits issued by the West Virginia Department of Environmental Protection and/or the United States Environmental Protection Agency. Ranson simply requires that any required permits for any project to be submitted prior to issuance of a vertical building permit and construction. Rockwool obtained its Clean Air permit from the West Virginia Department of Environmental Protection (WV DEP) on April 30, 2018, after meeting the requirements set forth by the Federal Clean Air Act as adopted by WV DEP. This included the submission of emissions data and the identification of the Best Achievable Control Technologies (BACT) that will be used to keep emissions below federal and state limits. Permitting under the Federal Clean Air Act is handled by the WV DEP. Prior to obtaining its air permit April 30, 2018, the WV DEP found that Rockwool had complied with all public notice and public comment periods required by the statute.

The City of Ranson will continue to encourage Rockwool to continue its engagement and sharing of information with the community as it proceeds through the construction process.

Ranson Approval Timeline and Public Meetings Timeline

March 26, 2012 – Planning Commission holds public hearing for Zoning Amendment for Jefferson Orchards. Zoning to Smart Code New Community PC Resolution #12-10 sent to Council for 2 readings.

March 26, 2012 – Planning Commission holds public hearing for Land Development Plan and Plat (LDPP) for Jefferson Orchards. Community Plan PC Resolution #12-13 pending zoning approval.

June 16, 2015 – North Port Station Feasibility Study

April 12, 2017 - Pre-application meeting

May 1, 2017 - Staff informed the Planning Commission that a site application for Jefferson Orchards is expected.

May 21, 2017 – Thrasher introduced as Rockwool’s site development engineer.

May 23, 2017: City met with DOH to discuss industrial access roadway and extension of North Port Boulevard

May 26, 2017 – Pre-Application Staff Comments on LDPP and Zoning shared with Gordon

June 5, 2017 - Staff brought forth a Special District Zoning workshop to the Planning Commission for code changes

June 19, 2017 – City Receives Sufficient Jefferson Orchards LDPP and Zoning Application

June 30, 2017 – Pre-Application Site Plan submitted to the City for Rockwool

July 5, 2017 – Final MOU Sent to the City

July 5, 2017 – Press release for Rockwool

July 6, 2017 – LDPP found to be Sufficient by City

July 10, 2017 – Public Hearing for Zoning Text Changes. Andy Blake gave the Planning Commission a presentation about Roxul. The presentation included a description of the company, what they do, and the products that they make. Andy informed the Commission that at the next meeting there would be a rezoning packet and a land development plan and plat packet presented.

July 13, 2017 – Staff Report for Jefferson Orchards petition issued

July 18, 2017 – City Council adopts Ordinance #2017-301 - 1st READING of an Ordinance of the City Council of Ranson, West Virginia, Amending the City of Ranson Municipal Code, Chapter 19A, Article 3, Sec. 3.9 "Special Districts and Chapter 19A, Article 6, Sec. 6.1 "Special District"; and Tables 22, 23A and 23B of Chapter 19A.

City Council Adopts Resolution #2017-032 - A Resolution of the City Council of Ranson, West Virginia Authorizing the Mayor or His Designee to Execute a Memorandum of Understanding Between Roxul and the City of Ranson

City Council Adopts Resolution #2017-033 - A Resolution of the City Council of Ranson, West Virginia Authorizing the Mayor or His Designee to Execute a Payment in Lieu of Taxes Agreement Between Roxul USA and the City of Ranson.

City Council Adopts Resolution #2017-034 - A Resolution of the City Council of Ranson, West Virginia Authorizing the Mayor or His Designee to Execute a Resolution Approving Alternate Mainline Sewer Extension and Financing Agreement Between City of Ranson, a Municipal Corporation and Political Subdivision of the State of West Virginia, and/or its Successors/Assigns, and the West Virginia Water Development Authority at the Direction of the West Virginia Infrastructure and Jobs Development Council.

August 1, 2017 – City Council Adopts Ordinance #2017-301 - 2nd READING of an Ordinance of the City Council of Ranson, West Virginia, Amending the City of Ranson Municipal Code, Chapter 19A, Article 3, Sec. 3.9 "Special Districts and Chapter 19A, Article 6, Sec. 6.1 "Special District"; and Tables 22, 23A and 23B of Chapter 19A.

August 7, 2017 – Planning Commission holds public hearing, PC Resolution #17-10 sent to Council for 2 readings

August 7, 2017 - Planning Commission is presented with the Jefferson Orchards LDPP and it is voted on and passed unanimously. PC Res-17-11- Jefferson Orchards LDPP

August 15, 2017 – Council Adopts Ordinance #2017-302 - 1st READING of an Ordinance Amending and ReEnacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code 19-20 and Chapter 19A, Article 1: "Jefferson Orchards" Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1)

August 17, 2017 – Thrasher Submits Site Plan Application

August 18, 2017 First transmittal to the reviewing team

August 25, 2017 – Roxul Site Plan Sufficiency Letter Issued

September 5, 2017 – City Council Adopts Ordinance #2017-302 - 2nd READING of an Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code 19-20 and Chapter 19A, Article 1: "Jefferson Orchards" Reallocating Transect Districts (District 8, Tax Map 12, Parcel 1).

September 5, 2017 – City Council Adopts Resolution #2017-044 - A Resolution of the City Council of Ranson, West Virginia Stating the Reasonable Expectation of the City of Ranson to be Reimbursed for Expenditures in Connection with the Engineering, Planning, Permitting, Construction, Improvement and Equipping of Water, Sanitary Sewer, Street Access and Construction and Related Infrastructure and Related Facilities for use by Roxul made prior

to the Issuance of Financial Commitments by the West Virginia Infrastructure Council and West Virginia Division of Highways and Taking Other Actions in Connection with Said Funds

September 5, 2017 – City Council Adopts Resolution #2017-045 - A Resolution of the City Council of Ranson, West Virginia Authorizing the Mayor or His Designee to Negotiate and Execute a Master Agreement with Toole Design Group for Engineering Services.

September 5, 2017 1st Staff Report Issued

September 7, 2017 – Subdivision Plat Application submitted to the City

September 8, 2017 2nd Site Plan Submitted

September 11, 2017 - Community Development update/discussion about the Roxul project

September 19, 2017 – Subdivision Plat Application submitted to the City

September 26, 2017 – Staff report for Subdivision Plat Application provided to Gordon

September 27, 2017 3rd Site Plan Submitted

October 4, 2017 - Staff report for Subdivision Plat Application provided to Gordon

October 6, 2017 2nd Staff Report Issued

October 10, 2017 – Final Plat or Recordation Transmitted to the City

October 18, 2017 The Planning Commission unanimously approved the Roxul Site Plan

PC Res- 17-13 Roxul Site Plan

October 19, 2017 – City Receives DEP Issued General Permit

October 25, 2017 4th Site Plan Submitted

October 27, 2017 – Roxul Submits Site Development Building Permit Application

October 30, 2017 – Site Development Building Permit Application issued with Conditions of Approval. Permit 17-250 issued on 11/1/2017. Permit allows for site disturbance: sediment and erosion control, clearing, rough grading, initial phases of stormwater system

November 9, 2017 3rd Staff Report Issued for Site Plan

November 15, 2017 – Permits Submitted for 2 Temporary Construction Trailers Permits 17-271 and 17-272

November 17, 2017 – Permits Issued for 2 Temporary Construction Trailers Permits 17-271 and 17-272

January 22, 2018 5th Site Plan Submittal for Site Plan

February 9, 2018 4th Staff Report Issued for Site Plan

March 3, 2018 6th Site Plan Submittal

March 21, 2018 5th Staff Report Issued for Site Plan

April 23, 2018 Changes to the site plan were submitted

April 27, 2018 6th Staff Report Issued approving site plan

May 3, 2018 – Hard Copies of Approved Final Site Plan Received. New Permit Card Issued – all conditions of approval removed

May 7, 2018 - The Planning Commission unanimously passed the Rockwool Site Plan changes presented

PC Res-18-03 Rockwool Site Plan

June 27, 2018 – County Addressing Office assigns property address: 665 NORTHPORT AVE

APPENDIX 12

List of public meetings, dating from January 17, 2017,
provided by the Jefferson County Development Authority

Includes meetings from:

JCDA

Ranson City Council

Ranson Planning Commission

Charles Town City Council

Charles Town Utility Board

Jefferson County Commission

Jefferson County Board of Education

WV Infrastructure & Jobs Development Council

Received from JCDA.

PUBLIC MEETINGS REGARDING PROJECT SHUTTLE / ROCKWOOL

Jefferson County Development Authority

- February 21, 2017 – Director’s Report: Project Shuttle making headway.
- May 16, 2017 – New Business Executive Session: Project Shuttle & Real Estate
JCDA authorized negotiations with legal counsel for Project Shuttle as discussed in Executive Session.
- June 13, 2017 – New Business Executive Session: Project Coliseum, Project Shuttle & Project Heat. JCDA approved the Memorandum of Understanding for Project Shuttle.
- August 22, 2017 – New Business: Approval of Project Shuttle PILOT Agreement. JCDA approved Project Shuttle PILOT agreement.
-Director’s Report: Roxul is moving forward.
- November 9, 2017 – Approval of Memorandum of Understanding between JCDA and City of Ranson. JCDA approved the Memorandum of Understanding between JCDA and City of Ranson.
- January 16, 2018 – Director’s Report: Rockwool has broken ground, utilities are coming in on schedule.
- February 20, 2018 – Director’s Report: Rockwool is moving dirt and proceeding as planned.
- April 24, 2018 – Director’s Report: Rockwool took a break from moving dirt for compression.
- May 15, 2018 – Director’s Report: Met with Rockwool’s North American CEO.
Groundbreaking scheduled for June 26th.
- June 19, 2018 – New Business: Consideration of First Reading of Ordinance Authorizing Issuance of Lease Revenue Bonds for Rockwool Waterline Project. JCDA authorized board members to proceed with the interview process and to select the engineering firm.

Ranson City Council

- January 17, 2017 – City Manager’s Report: Jefferson Orchard site submitted for manufacturer as part of RFP process.
- March 21, 2017 – City Manager’s Report: Staff continues to work and answer questions regarding Project Shuttle.
- July 18, 2017 – Council Business:
 - City Council approves first reading of ordinance, amendments to Special Districts/proposed revisions to new Community Special District.
 - City Council approves Memorandum of Understanding (MOU) between Roxul and the City.
 - City Council approves Payment in Lieu of Taxes (PILOT) Agreement between Roxul and the City.
 - City Council approves Alternate Mainline Sewer Extension and Financing Agreement between City and West Virginia Water Development Authority at the Direction of the West Virginia Infrastructure and Jobs Development Council.

- August 1, 2017 – City Manager’s Report: Roxul has turned in preliminary site plan and staff has provided comment. The State and City continue to work through infrastructure issues. Conversations ongoing about the City administering the sewer, water, and roadwork in order to combine the contracts, reduce administrative overhead, and create more efficiency.
 Council Business: City Council approves second reading/adopts ordinance, amendments to Special Districts/proposed revisions to new Community Special District.
- August 15, 2017 – Council Business: City Council approves first reading of ordinance, amending official zoning map of the City of Ranson/Jefferson Orchards Reallocating Transect Districts
- September 5, 2017 – Council Business:
 - City Council approves second reading/adopts ordinance, amending official zoning map of the City of Ranson/Jefferson Orchards Reallocating Transect Districts.
 - City Council adopts resolution expecting reimbursement from various agencies of the State of West Virginia for planning and construction of certain infrastructure in the aide of economic development for Roxul.
 - City Council approves agreement with Toole Design Group for Engineering Services.
- October 3, 2017 – City Council approves revolving line of credit with BB&T to provide bridge financing for infrastructure improvements tied to Project Shuttle and Roxul.
- October 17, 2018 – Communications from Mayor: Roxul Plant Correspondence.
- November 7, 2017 – City Manager/Staff Reports: Roxul update.
 - City Council approves Memorandum of Understanding (MOU) between Jefferson County Development Authority and City of Ranson for purposes of economic development of the City.
 - City Council approves Extension of Construction Hours for Roxul.
- December 19, 2017 – Council Business: Discussion on Roxul Update
- January 16, 2018 – City Council conducts workshop. Public Portion: Summary of Projects, including Roxul.
- February 6, 2018 – Communications from the Mayor: Rockwool Brochure.
 - Council Business: City Council approves Memorandum of Understanding (MOU) between West Virginia Department of Highways and City for construction of Northpoint Avenue which will serve Rockwool’s new manufacturing plant.
- February 20, 2018 – City Manager/Staff Reports: Project updates, including Roxul.
- March 6, 2018 – Council Business: 2018-2019 Budget Presentation, Discussion & Public Input includes Rockwool as part of economic outlook.
- April 3, 2018 – City Manager/Staff Reports: Updates including Roxul bids and site plans.
 - Communications from Mayor: Air Quality Permit Notice – Roxul
- May 1, 2018 – City Manager/Staff Reports: Updates including Roxul Plan Review.
- May 15, 2018 – City Manager/Staff Reports: Updates including City staff plans to travel to Mississippi to visit Rockwool plant.
- June 12, 2018 – City Manager/Staff Reports: Projects review including Jefferson Orchards Development – Rockwool Groundbreaking.
 - Communications from Mayor: Rockwool Groundbreaking

Ranson Planning Commission

- May 1, 2017 – Officers & Committee Reports: Site application for Jefferson Orchards is expected.
- June 5, 2017 – Staff conducts Special District Zoning Workshop; presents proposed revisions for new Community Special District.
- July 10, 2017 – Public hearing for zoning text changes for New Community Special District. Andy Blake gave a presentation about Roxul, describing the company and what they do and make. A rezoning and a land development plan and plat will be presented at the next meeting.
- August 7, 2017 – Public hearing on Jefferson Orchards Rezoning. Planning Commission approves Jefferson Orchards Land Development Plan & Plat.
- September 11, 2017 – Staff provides community development update/discussion about the Roxul project.
- October 18, 2017 – Planning Commission approves Roxul Site Plan.
- May 7, 2018 – Planning Commission approves Roxul Site Plan changes.

Charles Town City Council

- January 16, 2018 – Unfinished Business: Update from Charles Town Utility Board
- February 23, 2018 – New Business: Public Service District Resolution and Ranson Sewer Acquisition Next Steps
- March 19, 2018 – Referrals to Committees/Commission: Ranson Sewer Acquisition. Four items proposed for Ordinance Committee review, including Roxul project
- April 2, 2018 – New Business: City approves First Reading and Consideration of an Ordinance to Pursue a Sanitary Sewerage System Extension and Improvement Project to the Roxul Development Site.
- May 21, 2018 – Unfinished Business: City approves Public Hearing, Second Reading and Consideration of an Ordinance to Pursue a Sanitary Sewerage System Extension and Improvement Project to the Roxul Development Site.

Charles Town Utility Board

- March 14, 2018 – Ranson Asset Acquisition: Roxul Project Ordinance
- March 28, 2018 – Update Ranson Asset Acquisition: Roxul Project Ordinance and Customer Notification
- April 11, 2018 – Update Ranson Asset Acquisition: Roxul Project Ordinance and Customer Notification
- April 25, 2018 – Update Ranson Asset Acquisition: Roxul Project Ordinance and Customer Notification
- May 9, 2018 – Update Ranson Asset Acquisition: Discussion of Roxul Project Sponsor Certification, Roxul Project Ordinance, and Roxul Customer Notification
- May 23, 2018 – Update Ranson Asset Acquisition: Roxul Project Ordinance
- June 13, 2018 – Update Ranson Asset Acquisition: Roxul Project Ordinance
- June 27, 2018 – Update Ranson Asset Acquisition Closing

Jefferson County Commission

- April 6, 2017 – Discussion of Project Shuttle (Executive Session/Action)
Motion by Ms. Tabb to direct Mr. Reisenweber to proceed as discussed during Executive Session. Motion seconded and unanimously approved.
- August 3, 2017 – Approval of Project Shuttle (Discussion/Action)
Motion by Mr. Onoszko to approve the pilot agreement for Project Shuttle as presented by the Director of the Jefferson County Development Authority. Motion seconded and unanimously approved.
- May 31, 2018 – Approval of Resolution to Support Industrial Access Road (Discussion/Action)
Motion by Mr. Compton to approve the Resolution of Support for the Jefferson Orchard Industrial Access Road. Motion seconded and unanimously approved.

Jefferson County Board of Education

- September 11, 2017 – New Business: Review and possible approval of Roxul Pilot Agreement
- September 25, 2017 – Unfinished Business: Action on Approval of Roxul Pilot Agreement

West Virginia Infrastructure & Jobs Development Council

- December 7, 2017 – Projects Recommended for Infrastructure Fund Economic Development Assistance: Jefferson County Development Authority (Roxul water application) and City of Ranson (Roxul sewer application)

APPENDIX 13

Oral Remarks, City of Ranson Public Hearing
Rezoning Jefferson Orchards

Leslie McLaren
NA Corporate Communications & Stakeholder Relations
June 2020

City of Ranson Public Hearing June 23rd, 2020
Leslie McLaren
NA Manager, Corporate Communications & Stakeholder Relations
ROCKWOOL

For almost a year prior to our official ground breaking in June of 2018 ROCKWOOL was actively engaged in Jefferson County, attending and sponsoring events, making presentations to a cross section of the community and making ourselves available to answer any questions.

We were very excited when the exploratory meetings with state and local authorities were complete and we could publicly announce our plans to build in Jefferson County. On July 6th 2017 ROCKWOOL issued a press release, as did the State of West Virginia and the JCDA announcing ROCKWOOL's plans to build a manufacturing facility in Jefferson County. The announcement was met with much excitement and the news was covered extensively by local and area media... with many of these outlets noting we were building at the former Jefferson Orchards site.

The formal MoU between ROCKWOOL and the State of WV was signed in September 2017. In October ROCKWOOL mailed an information pamphlet to all residents of Ranson as well as those living within a two-mile radius introducing ourselves to the community. ROCKWOOL joined the local and State Chamber of Commerce, and in November 2017 hosted a local luncheon for Chamber members. Our VP Operations and I presented an overview of the company, the production process, our commitment to the environment, as well as our timeline, and job and vendor opportunities followed by Q & A session. Handouts with company information were available. This same presentation was repeated the following morning to elected officials and authorities and the business community and a rendering of the facility was unveiled. Both events received significant print and TV coverage. The only correspondence I received was a thoughtful letter from the Adams family in September and October of 2017 with questions regarding sound, lighting and stack visibility.

Another brochure with my contact information was sent out in January 2018. ROCKWOOL continued to sponsor and participate in local events and plans to develop training programs with Blue Ridge College were reported in the media. In addition to our own efforts to notify the public, our understanding is there were more than 40 public body reviews of this project between the summer of 2017 when the project was first announced and the summer ground breaking. There were more than 30 news stories on it in the local media and around 530 people on the WVDEP mailing list, including the local Sierra Club informing them of our air permit application permit.

In sum, for nearly the past three years, ROCKWOOL has been highly-visible and engaged in introducing the local community to its new Ranson facility.

Stacey Pfaltzgraff

From: Nicole Mello <snmello16@gmail.com>
Sent: Thursday, June 18, 2020 2:54 PM
To: Stacey Pfaltzgraff
Subject: Zoning hearing regarding Rockwool

CAUTION: External Email

Good afternoon,

My name is Nicole Mello and I live in Charles Town. I have lived in this beautiful state for almost four years. We chose to leave a very crowded New Jersey for the quieter life in West Virginia. I was distraught when I learned last year that land, across from an elementary school, was going to be utilized for a factory, Rockwool. From the beginning the deal was sketchy, no rules may have been broken but public opinion was not gathered in an effective manner. People live here for the views, they don't live here to live by refineries. They do not want heavy industry. The jobs offered will in no way truly help the county. They will bring in a bunch of their own employees. Giving them tax break doesn't help anyone but them. You need to work for the people of the county. The people are not for this. Please do not change ordinances to help Rockwool. Prioritize the needs of your citizens and allow Jefferson county to remain green and beautiful, and vote no on ordinance 2017-302.

Thank you for your time.
Nicole Mello

Sent from my iPhone

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Peter Milcetic <peter.milcetic@me.com>
Sent: Thursday, June 18, 2020 3:01 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan as quoted above states, "the City will designate ample land that is well-suited for industrial facilities." Due to the hydrogeology, this land is not well-suited for industrial facilities as would be allowed by the Special District Industrial. Respectfully, Mr. Stranko is incorrect in his assertion that the council is not allowed to take the environment into consideration in zoning decisions, as it is the purview of the DEP. In fact, the DEP implores local governments to do just that in its guiding documents on stormwater design in karst. The DEP Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." Clearly, the DEP is encouraging local governments to use zoning to steer development like this away from karst land. This karst area is inappropriate and ill-suited for this use and it should not be zoned for it.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." This zoning change would clearly adversely affect the health, safety, and welfare of the community. The Comprehensive Plan further states, "the City will designate ample land that is well-suited for industrial facilities." This land is clearly ill-suited for industrial use and should not be zoned for it. Therefore, the council should vote no on the zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--

Peter Milcetic
 peter.milcetic@me.com
 Shepherdstown 25443

Stacey Pfaltzgraff

From: Sarah Milcetic <sarah.milcetic@me.com>
Sent: Thursday, June 18, 2020 3:29 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and over all earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourists. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan as quoted above states, "the City will designate ample land that is well-suited for industrial facilities." Due to the hydrogeology, this land is not well-suited for industrial facilities as would be allowed by the Special District Industrial. Respectfully, Mr. Stranko is incorrect in his assertion that the council is not allowed to take the environment into consideration in zoning decisions, as it is the purview of the DEP. In fact, the DEP implores local governments to do just that in its guiding documents on stormwater design in karst. The DEP Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." Clearly, the DEP is encouraging local governments to use zoning to steer development like this away from karst land. This karst area is inappropriate and ill-suited for this use and it should not be zoned for it.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." This zoning change would clearly adversely affect the health, safety, and welfare of the community. The Comprehensive Plan further states, "the City will designate ample land that is well-suited for industrial facilities." This land is clearly ill-suited for industrial use and should not be zoned for it. Therefore, the council should vote no on the zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

Sarah Milcetic

--

Sarah Milcetic
sarah.milcetic@me.com
Shepherdstown 25443



June 18, 2020

Via Electronic Mail

Ranson City Council
 c/o Stacey Pfaltzgraff
 312 S. Mildred Street
 Ranson, WV 25438
 spfaltzgraff@ransonwv.us

Re: Proposed Ordinance #2017-302: "An Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: 'Jefferson Orchards' Reallocation Transect Districts (District 8, Tax Map 12, Parcel 1)"

Dear Members of the Ranson City Council:

Thank you for the opportunity to submit public comments on the City of Ranson's proposed Industrial District Ordinance. I'm Rory Moss, President of ROCKWOOL North America, now among my colleagues based at our new Ranson facility. I appreciate the opportunity to offer these comments as you consider re-enactment of the above-referenced zoning ordinance.

In the Memorandum of Understanding that the City entered with ROCKWOOL back in July of 2017, the City expressed its desire to increase its employment base, economic development and related revenues for the City and to promote investment on the Route 9 corridor. In support of those goals and consistent with the 2012 Ranson Comprehensive Plan objective to "Encourage manufacturing and assembly-line facilities to locate in Ranson," ROCKWOOL committed to constructing and operating within the City a state-of-the-art manufacturing facility with a capital investment of approximately \$150 million and an estimated initial employment base of 120-140 new full-time positions. We're pleased to be delivering on that commitment with civil construction approximately 75 percent complete and the factory on track to commence operations early next year.

And those aren't the only promises we've made and kept.

ROCKWOOL has operated in North America for more than 30 years and 80+ years globally, with a consistent track record of safeguarding the safety, health, and well-being of citizens in the communities surrounding the 46 other facilities where we already operate. That same approach governs the construction of our Ranson facility where we are consistently meeting and exceeding health, safety and environmental requirements

ROCKWOOL 655 Northport Avenue, Kearneysville, West Virginia 25430
 T: 1-800-265-6878 www.rockwool.com

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)



for the benefit of all concerned including our employees who will live, work and play in the surrounding communities.

In an effort to provide additional reassurance regarding the facility's environmental safety to residents with concerns about the facility's potential impact on local air quality, ROCKWOOL is fully funding two local air monitoring stations that began monitoring air quality last December and will continue doing so through December 31, 2022. Taking this step is not required by the MOU or any regulation, but we made and fulfilled that commitment to provide the community with independent, publicly-available data to track air quality – notwithstanding our 80+ years of experience operating in communities with schools, homes, hospitals, and areas of natural beauty nearby.

And fulfilling another commitment we made to the Jefferson County community, we recently completed and shared the human health risk assessment (HHRA) we commissioned, which reaffirmed the robustness and health-protective nature of the federal and state regulations upon which ROCKWOOL's air permit is based.

In another example of going above and beyond regulatory requirements, I am pleased to inform you that we will install groundwater monitoring wells as a means to further reassure you and the community regarding groundwater quality. We're taking this step notwithstanding the fact that no production process water is discharged to any retention ponds, waterways, grounds, or sewer systems.

Honoring our commitments is the way we do business. It's the ROCKWOOL Way. From our experience, honoring commitments is the Ranson Way as well, even when some may disagree with your actions. Thank you for honoring your commitments as you consider reenactment of the zoning ordinance now before you.

Sincerely,

A handwritten signature in blue ink that reads 'Rory Moss'.

Rory Moss
President, ROCKWOOL North America

Stacey Pfaltzgraff

From: Kimberly Nason <ryankimnason@me.com>
Sent: Thursday, June 18, 2020 12:34 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully ask you to vote NO on Ordinance #2017-302. The industry this zoning change will allow for endangers the health, safety and, welfare of the community, and violates the premise of the smart code zoning that we have spent so much time, effort and federal money employing.

This zoning change will provide for industry that will negatively affect the agriculture industry in Jefferson County and beyond. The combination of the air emissions and threat to the ground water resources could have devastating consequences for the agricultural community of Jefferson County.

The comprehensive plan of Ranson is clear: it states, "the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community." This land is ill-suited for an industrial facility due to its location and hydrogeology. Further, the industry that this zoning change will allow for will adversely affect the health, safety, and welfare of the community through its affect on the agricultural industry.

The agriculture industry in Jefferson County is hundreds of years old and continues to serve our community well today. According to the economic impact study "A Shared Agenda for Growing West Virginia's Agricultural Economy, Prepared by Fourth Economy for West Virginia Department Of Agriculture West Virginia University Extension Service 2012," Jefferson County is the second highest producing county for crops sales, third highest for fruits and vegetables sales, and in the top 9 counties for sales of animals and animal products.

Agriculture, tourism and the equine industries work synergistically to have an outsized positive impact on the economy in Ranson and Jefferson County as a whole. Agriculture drives tourism by creating agro-tourism opportunities, preserving beautiful open spaces that contribute to the bucolic nature of our county, and providing the locally produced agriculture goods many tourists are look for in our markets and restaurants. Agriculture also supports the equine industry by providing local products like hay and straw, helping maintain pasture land, co-supporting local dual-purpose retail stores, and helping recycle by products. Agriculture helps maintain the way of life that many those who choose to live in Jefferson County enjoy. Industrial manufacturing and industry this zoning will provide for could never achieve these things.

Local agriculture also provides a source of locally produced agricultural goods. It has become apparent with the current pandemic and health emergency. This became a supply chain crisis because as our supply chains have moved to be ever more lean and efficient they lack resiliency and agility. By having a local source of agricultural goods and food we add resiliency and agility into our own economy and community. The agricultural industry in Jefferson County provides this.

A plethora of scientific studies have shown that a variety of air pollutants produced by the type of industry this zoning change would provide for causes decreased yields of both quantity and quality for several of the crops important to Jefferson County including winter wheat and soybeans. Soybeans and wheat are two of the crops significantly affected and two of the most prevalent crops in Jefferson County. Lower crop yields harm the farms and all the members of the down stream supply chain as well as the consumer. In this way, this zoning change will adversely affect the welfare of the community.

Recent studies have shown that even small increases in air pollution affect the productivity of agricultural workers. Similar to the reduction in crop yield this will negatively affect the individual workers, businesses, consumers and industry as a whole. In this way, this zoning change will adversely affect the health and welfare of individuals and the community.

Even more devastating is the possibility of groundwater contamination. The land at the subject location has karst hydrogeology and as such has porous bedrock and severe ground instability problems. The porous bedrock allows rapid diffuse infiltration of surface water into ground water and the severe ground instability problems leads to sinkhole development. Sinkholes provide direct connection of the surface water with the ground water aquifer through point infiltration. In fact, according to a 2012 study by Doctor and Doctor, the subject location and that of Terrapins Neck have the highest sinkhole vulnerability of any sites in Jefferson County. The propensity and easy of diffuse and point infiltration in areas of karst hydrogeology give them very high aquifer vulnerability meaning the aquifer is very vulnerable to contamination. For this reason, this measure has been used for decades by policymakers to set land use regulations. In this way, this zoning change and the industry it will provide for will adversely affect the welfare of the community.

The WVDEP recognizes development in car karst areas puts water resources high-risk for contamination but also recognizes that this is best protected against true local land use and zoning ordinances. WVDEP's guiding document Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." This document also references the Chesapeake Bay Stormwater Network karst stormwater guidance document the CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed. In which it states "...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." Land use policy in Ranson and zoning need to take aquifer vulnerability into consideration as these agencies and documents suggest.

The Jefferson Orchards Voluntary Remediation Plan application reports that the ground water is only 60 feet from the surface at the site. It is described in the scientific literature that this land is an upland plane with large amounts of water in the epikarst, and contamination of this water effects the whole aquifer including the communications with surface water streams. A USGS study demonstrated that the groundwater adjacent to the site communicates readily with several surface water structures and wells miles away from the site. The effects of contamination at this site would go well beyond Ranson fouling large portions of the ground water and surface water in Jefferson County.

Groundwater contamination at the site would have devastating effects on the Agricultural industry in Jefferson county. For geographic and economic reasons it is simply infeasible for the agricultural industry to rely on utility provided water. Based on the scientific literature the site being considered for rezoning is one of the areas of highest aquifer vulnerability in Jefferson County and is inappropriate for the industry that this zoning change will provide for. This land is clearly ill-suited for industrial use and should not be zoned for it.

By threatening the local agricultural industry, the industry that this zoning will provide for will threaten the health, safety, and welfare of the community, and this land is not well-suited for industrial use. The Comprehensive Plan in Ranson is clear the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of

the community." To achieve this the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

This issue has deeply concerned my family and myself deeply since it became known to us. We are deeply concerned at the effect it will have on the quality of the food we eat, as we buy more than 50% of our groceries from local farms. We hold the position that if Rockwool comes to Jefferson county that we will be moving out of the county. Please don't destroy the Jefferson county with heavy industrial. My children love this county but I will not stay when it offers nothing besides pollution for my children. There are better ways to bring good jobs to Jefferson county.

Sincerely,
Kimberly Nason

--
Kimberly Nason
ryankimnason@me.com
Harpers Ferry 25425

Stacey Pfaltzgraff

From: anh nguyen <nguyenthaianh2007@yahoo.com>
Sent: Thursday, June 18, 2020 3:18 PM
To: Stacey Pfaltzgraff
Subject: Ordinance 2017-302

CAUTION: External Email

Dear Ranson City Council,

I am writing to encourage the City of Ranson's City Council to adopt the Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)". It is time to move past the false narrative being pushed by destructive environmental radicals who seek to destroy Ranson's progress. The City Council previously made the decision to rezone the property in question and hundreds of millions of dollars have been spent by private and public entities based upon Ranson's governmental act. Failure to adopt the Ordinance will subject Ranson to years of costly and needless litigation (that it will lose), which will force Ranson to cut public services to Ranson's citizens.

Sincerely,

Anh Nguyen.

[Sent from Yahoo Mail on Android](#)

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Denise Nick <dnick@res1.net>
Sent: Thursday, June 18, 2020 4:50 PM
To: Stacey Pfaltzgraff
Subject: Proposed Ordinance

CAUTION: External Email

Dear Ranson City Council, I am writing to encourage the City of Ranson's City Council to adopt the Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)". It is time to move past the false narrative being pushed by destructive environmental radicals who seek to destroy Ranson's progress. The City Council previously made the decision to rezone the property in question and hundreds of millions of dollars have been spent by private and public entities based upon Ranson's governmental act. Failure to adopt the Ordinance will subject Ranson to years of costly and needless litigation (that it will lose), which will force Ranson to cut public services to Ranson's citizens.

Sincerely,
Denise Nick

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Greg ... <greg22020_1234@yahoo.com>
Sent: Thursday, June 18, 2020 2:16 PM
Cc: Stacey Pfaltzgraff
Subject: no to rezoning Ranson 2017-302

CAUTION: External Email

Mayor Pierson and Ranson Town Council regarding rezoning 2017-302:

Am pointlessly writing this letter on the off chance any of you actually care what the overwhelming majority of the community thinks concerning Rockwool. Only a minority wants this project.

Have no idea why you all think Rockwool is a good idea. Of course it will only be technically in Ranson. The rest of us in the county get to endure your poor judgment while Ranson Town Hall is miles away.

Who thinks trucking in 90 something tons of coal a day to a factory located across the street from an elementary school and one of the poorest neighborhoods in Jefferson County is a good idea? There is no way to keep the transportation of coal clean, plus the out going trucks bringing product to market. Have you thought about how much damage this will do to the area roads and the pollution these trucks omit.

If Rockwool was such a good idea, then why all the attempts to keep it under the radar while you back doored it in the county? Does Project Shuttle ring any bells?

Why have most of the folks who help bring it here skipped town and left you holding the proverbial bag?

Jefferson county is already home to two super fund clean-up sites. Most counties in the country have none, let alone two. The writing on the wall, Rockwool will be number three. Not sure about that? Those two companies have already snookered you. You thought the same about them.

Moreover, who thinks encouraging heavy industry to move into a bucolic bedroom and farming community fits with any comprehensive plan? Talk about killing the goose that laid the golden egg??!!! Thanks for killing property values.

Speaking of economics... I guarantee you Rockwool would have moved here and paid the costs. They need this location. No one else will have them. And yet, we squander

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

tax dollars on a company that can afford to pay their bills at the expense of our community needs. Rockwool does not address our community needs by any measure.

One can only conclude either the Mayor and Town Council are either on the take, or too ignorant to be in a position of responsibility., Either way, once again Ranson is the black eye of the county. Might as well change the name from The Town of Ranson to The Town of Rockwool. That would be far more honest. Time to step up to the plate and do the right thing. Let Rockwool sue. They built at their own risk. Plus you can't collect from a town that has nothing.

Greg Phillips

3034 Bakerton Rd.

Harpers Ferry , WV 25425

(304)870-8068

Stacey Pfaltzgraff

From: pat phillips <paphillips321@gmail.com>
Sent: Thursday, June 18, 2020 1:07 PM
To: Stacey Pfaltzgraff
Subject: No to Ranson rezoning (2017-302)

CAUTION: External Email

Pat Phillips

3034 Bakerton Rd.

Harpers Ferry, WV 25424

Stephanie,

Please acknowledge that this email has been received and placed in the public record. Thank You. Pat

Objection to the rezoning for industrialization in Ranson, WV (2017-302)

I am writing to voice my concern on the rezoning of land from the Jefferson Orchards, to Ranson, Jefferson County, West Virginia. This rezoning was initiated and completed in secrecy from Jefferson County residents by the Town of Ranson for the sole purpose of bringing in a noxious, highly polluting, foreign, heavy industrial factory, Rockwool. The secret "Project Shuttle" deal of rezoning to allow foreign industry in to the community, in reality is counter-productive to Jefferson County's economic progress and growth, health of its citizens, and does not provide any of the benefits that the original 2012 comprehensive plan for Ranson would have provided. I object to this rezoning as it was completed against county resident knowledge, and later, when Rockwool was revealed, the wishes of the majority of Jefferson Counties residents.

Ranson's initial 2012 Comprehensive plan could have been one giant step in bringing prosperity and future economic growth and needed infrastructure to this area. **Progress is possible only in areas when residents are happy in their environment. It's all about place, a place to call home, place and quality of life matters.** We in Jefferson county still need proper cell and internet coverage, decent shopping, the MARC station, social and cultural resources, i.e. a movie theater if this area is to thrive. Heavy industry drives future business away from having these amenities. The 2012 comprehensive plan endorses 100 year growth plan, whereas the implementation of zoning industrial will stifle any new progressive development.

Why was the 2012 Ranson comprehensive plan that so many worked on and agreed to it's concepts just thrown out the window and not implemented? Who in this county, with the threat of Rockwool, will adequately protect the citizens against air emissions, potential devastation to our groundwater, our health, dropped property values, lack of tourism, the health of the equine industry, inability to farm organically and lack of potential smart growth in this county? Who will provide for the interests of our residents?

The rezoning of Jefferson Orchard has led to the complete upset of the local Jefferson County Development Authority, (JCDA) with half of the members resigning once it was revealed that Rockwool was moving in. The rezoning was the lead cause of death threats to the former Mayor of Charles Town, Mayor Scott Rogers, which in turn, for his and his family's safety, have moved out of state. The rezoning has caused the Jefferson Board of Education, (BOE) to fight lawsuits to try to regain this property. The rezoning has caused the Jefferson County Commission, (JCC) many hundreds of hours of unproductive time and money dealing with the aftermath. In short, most of local governments have devoted thousands of unproductive hours and money dealing with the results of this bad decision.

Many children in schools and daycare near the vicinity of this factory are endangered and are at risk for contracting asthma, allergies and upper respiratory infection and other diseases. Farmers in close proximity must worry about harm to their livestock and produce as labeling as organic would not be feasible.

Jefferson County is special in so many ways. We have the highest standing of college graduates in the state as well as the highest tourism revenue in the state. JC is a weekend getaway for the DC-Baltimore area and a destination for history buffs and outdoor enthusiasts, sightseers, casino goers, and a great place to retire. Rockwool emissions and smoke stacks will severely harm our tourism industry. Who will want to come here for recreation or to purchase a house in an area that emits 392 tons of toxins 24/7/365? Many concerned residents have already moved away.

In short, rezoning land for inappropriate use, i.e. Rockwool will destroy the Eastern Panhandle and will drive people away. **What happened to working together for the future of our community?** No county authority should act without the acknowledgment and opinion of their taxpayers. This rezoning will place severe negative effects on every citizen and every entity in the county and surrounding area. Do the right thing and revoke the rezoning!

Stacey Pfaltzgraff

From: DaveandJeanAnne <daveandja@yahoo.com>
Sent: Thursday, June 18, 2020 11:28 AM
To: Stacey Pfaltzgraff
Subject: Zoning/Rockwool

CAUTION: External Email

Dear Ranson Mayor and Council Members,

I strongly oppose the zoning change which allowed the Rockwool project. Given the opportunity there should be no hesitation on your part to do the right thing. The fact that a court decision has returned the process to this point makes it clear that public input was illegally bypassed. A clear majority of the public does not want heavy industry located in Jefferson County. Look at the 2018 local election results if you say, how do you know the majority feels this way.

Personally, after teaching at Jefferson High School for nearly 40 years, I have always thought I lived in Jefferson County not Shepherdstown. My students came from all over the county. They attended Jefferson High. This is the crux of my disdain for the Rockwool project. It is IMMORAL to build it across from an elementary school. I taught many kids who attended North Jefferson; actually several generations of them.

It is very infrequent in one's life when an opportunity arises to correct a mistake that negatively impacts other people's lives. You have been granted that chance. Please embrace it and reverse the zoning decision.

Sincerely,
Dave Pugh

[Sent from Yahoo Mail for iPad](#)

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Mark Ralston <mralston@fjrpllc.com>
Sent: Thursday, June 18, 2020 2:07 PM
To: Stacey Pfaltzgraff
Cc: tgrant@cityofransonwv.net
Subject: Jefferson Orchards' Written Comments on Ordinance 2017-302 [IWOV-Legal.FID60287]
Attachments: JO Ltr to City Council (061820).pdf

CAUTION: External Email

Ms. Pfaltzgraff:

Please find attached Jefferson Orchards' written comments regarding the subject proposed ordinance.

Please feel free to contact me if you have any questions.

Best,

Mark H. Ralston | Attorney
 FISHMAN | JACKSON | RONQUILLO PLLC
 13155 Noel Road, Suite 700 | Dallas, Texas 75240
 Direct Dial: 972.419.5544 | Fax: 972.419.5501
 Email: mralston@fjrpllc.com



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Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)



June 18, 2020

VIA EMAIL: SPfaltzgraff@ransonwv.us

City Council, City of Ranson
 c/o Ms. Stacey Pfaltzgraff
 312 S. Mildred Street
 Ranson, WV 25438

Re: Written Comments of Jefferson Orchards, Inc. in Support of Ordinance # 2017-302
 (the "Rezoning Ordinance")

Dear City Council Members:

Jefferson Orchards, Inc., the petitioner for the Rezoning Ordinance, remains in favor of the Rezoning Ordinance and, for the reasons described further below, contends that the proposed rezoning is not only consistent with the City's 2012 Comprehensive Plan, but will permit the City to better fulfill the goals articulated in that plan.

As you know, the Rezoning Ordinance was originally approved by the City in 2017 and is now being presented for re-approval by the City to address alleged procedural deficiencies in the original approval process. At the time that it originally presented the petition, Jefferson Orchards owned all of the real property that is the subject of the Rezoning Ordinance, consisting of a 388-acre tract, all of which were contained in the City (the "Original Jefferson Orchards Property"). The impetus behind Jefferson Orchard's petition was to enlarge the existing SDI (Special District Industrial) Transect District from 95.4 acres to 198.7 acres. The need to expand the SDI reflected market demand for manufacturing and industrial use in the Eastern Panhandle, and the compatibility of the portion of the Original Jefferson Orchards Property subject of the petition for that use.

After the City Council approved the Rezoning Ordinance, Jefferson Orchards sold substantially all of the SDI zoned property, consisting of 195 acres of the Original Jefferson Orchards Property (the “Rockwool Property”) to Roxul USA, Inc., (commonly known as “Rockwool”). Jefferson Orchards continues to own the Remaining Jefferson Orchards Property, as well as an additional tract of real property commonly known as the “Miller Farm,” located adjacent to the northern boundary of the Rockwool Property and the Remaining Property. (The Miller Farm is not located in the City.) Jefferson Orchards also retains a purchase option interest on a 55-acre portion of the Rockwool Property.

In 2011 the City engaged with its citizens and the community to develop a new comprehensive plan. A highlight of the effort included seven days of workshop sessions during which more than 400 individuals collaborated with the City’s planning team. As a result of those efforts, in 2012 the Comprehensive Plan was formulated and adopted by the City Council. The Comprehensive Plan reflects the possible development of the Jefferson Orchards Property as “transit-ready TOD with an industrial employment base”.¹ The section also shows an SDI transect on the western side of the property. Thus, since 2012, industrial development at Jefferson Orchards has been an express goal of the City.

As had been previously determined by the City’s Planning Commission in 2017, the Rezoning Ordinance is consistent with the City’s Comprehensive Plan. To echo the *Request for Council Action* memorandum prepared by City Manager Tony Grant and City Attorney Tim Stranko, the original Smart Code zoning plan for the Jefferson Orchards Property included an SDI zone. The Rezoning Ordinance, therefore, does not create any “new” SDI zone or any new permitted use of the Jefferson Orchards Property. Rather, it merely provides for the modification of the existing SDI zone boundaries. In that regard, the expanded SDI district is contiguous to the original SDI district. And, additionally, the adjacent properties impacted by the SDI expansion are owned by either Jefferson Orchards or CSX Corporation. Finally, the Rezoning Ordinance also retains the other permitted uses for the Remaining Jefferson Orchards Property.

Furthermore, the proposed rezoning is not only consistent with the Comprehensive Plan’s designation of the subject property as a G-3 Preferred Growth Sector, but we believe that it is essential to the future development of the Jefferson Orchards Property and other Preferred Growth and Controlled Growth Sectors in the City.² For several years prior to the 2017 approval of the Rezoning Ordinance and the subsequent sale of the Rockwool Property to Rockwool, Jefferson Orchards had actively marketed its property for the development contemplated under the Comprehensive Plan (that is, for mixed-use transportation-oriented development and for manufacturing development). Jefferson Orchards’ efforts to interest development of those concepts, however, was wholly frustrated by the region’s lack of adequate utility infrastructure and related services. As a result of the 2017 approval of the Rezoning Ordinance and the related industrial development of the Rockwool Property, we have seen extensive governmental and private investment to extend and enhance utility infrastructure, including the extension of

¹ See *Comprehensive Plan* at Appendix B. Sub Area Plans, pp. xiv-xv.

² See *Comprehensive Plan* Section 2.3.3 and 2.3 Sector Map, pp. 20-21.

natural gas into the area and major improvements to the water and sewer systems and the electrical grid. We believe that those improvements will be the primary drivers of future development in the area.

We also believe that the positive economic stimulus that has been and will be provided by Rockwool's presence in the City will create synergies for other positive economic development. That Rockwool, an international manufacturing concern, has determined to locate in the City should demonstrate that the City is a business-friendly locale for other manufacturers or similar businesses. This may be especially important given the current issues arising from the COVID-19 pandemic, as the pandemic has and may continue to depress the tourism-related sector—a current pillar of the City's economy .

Although the opposition to Rockwool has been loud, we believe that it is based on unfounded or speculative concerns (and a desire by some to prevent development in the region). As noted in the *Request for Council Action* memorandum, however, those ostensible concerns are not relevant to the issue of whether the Rezoning Ordinance is consistent with the City's Comprehensive Plan. Because the Rezoning Ordinance is consistent with the Comprehensive Plan, it should be approved.

Sincerely,

Digitally signed by Mark H. Ralston
DN: cn=Mark H. Ralston, o, ou, email=mrjalston@fjrpllc.com, c=US
Date: 2020.06.18 12:19:50 -05'00'

Mark H. Ralston
President
Jefferson Orchards, Inc.

cc: Tony Grant (via email: tgrant@ransonwv.us)



June 18, 2020

Via Electronic Mail
Ranson City Council
c/o Stacey Pfaltzgraff
312 S. Mildred Street
Ranson, WV 25438
spfaltzgraff@ransonwv.us

Re: Proposed Ordinance #2017-302: "An Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: 'Jefferson Orchards' Reallocation Transect Districts (District 8, Tax Map 12, Parcel 1)"

Dear Members of the Ranson City Council:

Thank you for the opportunity to submit public comments on the City of Ranson's proposed Industrial District Ordinance. I'm Peter Regenberg, Vice President, U.S. Operations, ROCKWOOL North America with overall responsibility for construction of our new Ranson facility.

At ROCKWOOL, we take our responsibility to build and operate safe facilities extremely seriously. Our goal is to ensure the safety of everyone who comes on site so that everyone goes home safely. In fact, we recently reached a significant milestone at our Ranson construction site with 500,000 hours worked without a recordable injury.

That same commitment to safety extends to the communities in which we operate. For example, our permitted emissions will be well within the limits set by the U.S. Environmental Protection Agency (EPA), West Virginia Department of Environmental Protection (WV DEP), and in accordance with the Federal Clean Air Act. These are stringent standards designed to protect the health of sensitive populations such as children, asthmatics, and the elderly.

As part of our efforts to reduce water consumption, our new facility includes two retention ponds that will store rain water and stormwater runoff to be used as the primary source of water in the production process. While both retention ponds are designed to accommodate a "100-year storm event," the closed-loop pond has an additional 250 percent storage capacity margin of safety. This design is consistent with our practice to go above and beyond regulatory requirements and will provide a greater margin of environmental safety to prevent flooding or overflow from excess rainfall or stormwater run-off.

ROCKWOOL 655 Northport Avenue, Kearneysville, West Virginia 25430
T: 1-800-265-6878 www.rockwool.com

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)



Furthermore, ROCKWOOL has voluntarily chosen to install retention pond liners that exceed regulatory requirements. Building on karst geology has been taken into consideration in the design of this manufacturing site to further safeguard the environment.

And for the sake of full clarity, the retention ponds **will not** store toxic or hazardous waste materials or production process waste water.

Following extensive sampling of the former Jefferson Orchards site which revealed elevated concentrations of pesticides in the soil, ROCKWOOL entered the West Virginia Department of Environmental Protection (WV DEP) Voluntary Remediation Program to properly restore the contaminated soil. We then excavated and properly disposed of the polluted soil, and secured approval for industrial use from the WV DEP.

In closing, let me say that many criteria were considered when choosing this location from among 50 sites in 10 states – factors including the proximity to our markets in the eastern United States, transportation corridors including the adjacent four-lane highway and proximity to airports, labor quality and availability, and nearby higher education institutions. Of similar importance was the quality of life of which Ranson is understandably proud. We want to be here for the same reasons you do and we're committed to environmental stewardship while providing the new jobs, meaningful career opportunities, economic development and related revenues the City sought through its initial approval of this zoning ordinance.

Thank you again for the opportunity to comment as you consider reenactment of the zoning ordinance to address the technical issue identified by the Circuit Court.

Sincerely,

A handwritten signature in black ink, appearing to read 'Peter Regenberg', written over a horizontal line.

Peter Regenberg
Vice President, U.S. Operations, ROCKWOOL North America

Stacey Pfaltzgraff

From: Sell, Mary T. <MSell@BHFS.com>
Sent: Thursday, June 18, 2020 4:30 PM
To: Stacey Pfaltzgraff
Cc: mcatignani@cthbpa.com
Subject: CTHBPA and WVTBA Joint Comment for the Record 2017-302
Attachments: Joint Public Comment of CTHBPA and WVTBA - Ordinance 2017-302.pdf

Importance: High

CAUTION: External Email

Good afternoon,

On behalf of the Charles Town Horsemen Benevolent Protection Association and the West Virginia Thoroughbred Breeders Association (collectively, "The Jefferson County WV Thoroughbred Equine Industry"), we respectfully submit the Joint Comment regarding the City of Ranson, WV's, Proposed Ordinance Number 2017-302.

Thank you.

Sincerely,

Maria Catignani, Executive Director, Charles Town Horsemen Benevolent Protection Association
(304) 725-1535

and

Mary Sell

Legislative Chair, The West Virginia Thoroughbred Breeders Association
(202) 302-2789

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Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)



Charles Town HBPA
PO Box 581
Charles Town, WV 25414



WV Thoroughbred Breeders Association
PO Box 626
Charles Town, WV 25414

TO WHOM IT MAY CONCERN: Regarding Ranson WV, Ordinance #2017-302

On behalf of the Charles Town Horsemen Benevolent Protection Association ("CTHBPA") and the West Virginia Thoroughbred Breeders Association ("WVTBA"), (collectively, "The Jefferson County WV Thoroughbred Equine Industry") the undersigned state as follows:

1. The Jefferson County WV Thoroughbred Equine Industry represents Owners, Trainers and Breeders of Thoroughbred Racehorses.
2. The Jefferson County WV Thoroughbred Equine Industry works proactively and collaboratively to promote the WV Thoroughbred Industry, including funding the important economic studies on the value of our industry to the local and state economy¹. The Jefferson County WV Thoroughbred Equine Industry works with many partners and groups at the local, regional and national levels, to ensure the highest standards for our industry.
3. The Jefferson County WV Thoroughbred Equine Industry takes no position on Ranson, WV's Ordinance #2017-302.
4. Several external organizations and individuals have indicated they represent the position of the Equine Industry. However, the Jefferson County WV Thoroughbred Equine Industry is the elected representative of the Equine Industry. We respect the right of any member of our respective organizations to express their opinions and to comment solely in their individual capacity.

The Jefferson County WV Thoroughbred Equine Industry, has carefully reviewed data that has been presented, in the public domain, and states the following: We believe the evidence to date is inconclusive that thoroughbred horses bred, foaled, stabled, trained and raced in, or proximate to Jefferson County will be at increased risk for their health and safety, and/or will become unsuitable for future careers due to City of Ranson WV's, Ordinance #2017-302.

¹ Godfrey, Meinert, Witt The Economic Impact of the Charles Town Thoroughbred Horse Racing Industry on the Jefferson County and West Virginia Economies 2010 (Publish date Nov. 2011)
"Funding for this research was provided by the Charles Town Horsemen's Benevolent and Protective Association (HBPA) and the West Virginia Thoroughbred Breeders Association."

Bowen, Deskins, Christiadi, Augustine The Economic Impact of the Thoroughbred and Greyhound Racing Industries on West Virginia's Economy 2012 (Publish date 2014)
"Funding for this research was provided by the Charles Town Horsemen's Benevolent and Protective Association (HBPA), Mountaineer Park Horsemen's Benevolent and Protective Association, the West Virginia Thoroughbred Breeders Association, and the West Virginia Greyhound Owners and Breeders Association."

The Jefferson County WV Thoroughbred Equine Industry remains dedicated and vigilant to its continued focus promoting the historic traditions of West Virginia's racing and breeding in Jefferson County, and ensuring the highest standards of safety, health and longevity for our thoroughbreds, horsemen and industry.

Respectfully submitted - The Jefferson County WV Thoroughbred Equine Industry


By: Jim Miller, President
Charles Town Horsemen Benevolent
Protection Association

Date: 6/18/20


By: John Funkhouser, President
West Virginia Thoroughbred Breeders Association

Date: 6/18/20



Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: elwood369@frontiernet.net
Sent: Thursday, June 18, 2020 3:45 PM
To: Stacey Pfaltzgraff
Subject: RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS

CAUTION: External Email

To whom it may concern,

I vote NO.

In reference to the recent Public Notice of Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please take this as official notice that I DO NOT support rezoning of Jefferson Orchards or any other area in the county that would support heavy industry.

Sincerely,

Brent Shiflett
Jefferson County, WV

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: snowyriver@frontiernet.net
Sent: Thursday, June 18, 2020 12:10 PM
To: Stacey Pfaltzgraff
Subject: "NO" to Rockwool

CAUTION: External Email

No to Rockwool, No to Heavy Industry Rezoning

The citizens of Jefferson County and the citizens of counties in states surrounding us have put in endless hours working towards putting a "Stop to Rockwool ". Their voices and efforts have provided the City Council and our Mayor the Chance To Right A Wrong! Citizens should not be forced to face life under a smokestack of contamination! The air quality, the rivers and the land are at risk. Pollution from the Rockwool facility WILL cause IRREVERSIBLE damage. Ultimately, the environmental impact will make basic life unsafe.

A stand HAS to be made. Protect the environment to ensure that we all stay healthy! What we let happen on this piece of land in Jefferson County affects the health and welfare of our residents as well as people for miles around us. As citizens we work hard in the present to protect the future. A public health risk is unacceptable, period. The ONLY answer is NO to Rockwool and NO to Heavy Industry!

Heather Shiflett
Jefferson County Resident

Stacey Pfaltzgraff

From: Jeananne Shultz <jeannehs@icloud.com>
Sent: Thursday, June 18, 2020 1:07 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

I respectfully request that you vote NO on Ordinance #2017-302. This rezoning will put an undue hardship on the wastewater treatment systems, burden the rate payers and risk surface waterways in Charles Town, risking the health, safety and welfare of the community. The comprehensive plan of Ranson states, the City "will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community." Therefore, please vote NO on #2017-302.

The nature of the industry that this zoning will allow will be harmful to our local economy. Charles Town has spent a lot of time and money improving our downtown area for restaurants and retail. We are working to take advantage of the tourism industry in our county and bring more people into Charles Town. The eye sore, noise pollution, air pollution, and obvious move away from sustainability will drive people away from Jefferson County and Charles Town, rendering our efforts ineffective and unrewarding. This will make it harder for our small businesses to be successful. In this way, the industry this zoning will provide for will adversely affect the welfare of our community.

According to the 2018 WVU economic study of the eastern panhandle, over 40% of the workforce in Jefferson County choose to work outside of the state. These commuters bring that money home and spend it here supporting our local small businesses, economy and government. Charles Town has a large number of residents who commute. These typically higher earners may choose to leave the area because of the presence of the industry that this zoning change would provide for. This will cause a hardship on our economy and municipality. In this way, the industry this zoning will provide for will adversely affect the welfare of our community.

The industry that this zoning will allow will cause stress for multiple reasons on the Charles Town wastewater treatment systems and the surface waterways in Jefferson County and beyond. The industry currently planning to utilize the zoning change will have discharge to the wastewater system that is high in chloride, primarily from its water softening system. The NPDES permit modification allows up to 5,000 mg/L. Chloride is not settled or removed at the wastewater treatment plant. It cannot be removed by conventional means and would be prohibitively expensive to do by new technology. This is of concern to Charles Town because chloride can harm stream water and also impair functioning of the wastewater treatment plant. Furthermore, the corrosive nature of chloride can cause damage to pipes both in the wastewater system and those used by downstream drinking water systems, like the \$207 million Trap Rock Water Treatment plant in Loudoun.

The human health criteria for chloride under WV standards is 250 mg/L. Under low stream flow conditions, chloride additions to the treatment plant effluent, as proposed by the industry currently planning to utilize the zoning change, could cause chloride levels in Evitts Run to exceed this standard. If the amount of chloride increased due to expansion or higher throughput, then this human health standard would be violated frequently. Chlorides are also known to harm aquatic life and effect metal toxicity in rivers. The USEPA and several states have surface water guidelines of 230mg/L

for chronic exposure. This would also pose a risk of damaging the water treatment facilities downstream on the Potomac River.

A research study by Lefebvre and Moletta in 2006 showed that chloride and salinity impair the ability of wastewater treatment to remove phosphorus and nitrogen, and because of this, other states have introduced legislation to treat saline wastewater. Uygur and Kargi in 2004 looked at the effects of salt on synthetic wastewater treatment. They found that removal of both nitrogen and phosphorus was reduced when salinity increased from 0 to 6%. In fact, the removal efficiency of ammonia dropped from 96% to 39% with this increasing salinity. Hong et al. In 2016 found phosphorous removal decreased 20-28% when chloride concentrations went from 150 mg/L to 1,500 mg/L. Phosphorous removal was completely inhibited at concentrations greater than 2,500 mg/L. This increased salinity has the potential to make the Charles Town wastewater treatment system work far less efficiently.

In addition to the contents of the wastewater this type of industry will produce, the volume of sewage is itself a concern. Given that the City of Charles Town has been in violation of its permit on numerous occasions for spills and overflow of untreated sewage, adding large volumes of wastewater will further challenge the near capacity system. This will mean that costly capacity upgrades will need to be done likely sooner than they would have needed to be done, imposing further financial strain on the system. Through these effects, the industry this zoning will provide for will adversely effect the health, safety, and welfare of the community.

This zoning change will provide for industry the likes of which are not present in this county and have not been present in this county for many decades. We find it appalling that the introduction of zoning for such industry is being done in an area of the county that is historically underserved and lower income. It is even more egregious because the worst effects including air pollution and groundwater contamination will be felt first and most severely in the immediate vicinity, and Ranson does not even have residents in the immediate vicinity of the proposed zoning change. This decision is being contemplated without representation of those who will be most affected. This would be a deplorable example of environmental injustice.

This zoning will provide for industry that will harm our economy, drive away residents, challenge and or damage our infrastructure, and may damage our waterways and wild life. Through these effects, the industry this zoning would allow will adversely effect the health, safety, and welfare of our community. This is being done with out representation of those it will affect the most. Please vote No on Ordinance #2017-302.

Sincerely,
Jeananne Shultz

--
Jeananne Shultz
jeannehs@icloud.com

Stacey Pfaltzgraff

From: Christine Snyder <christinemillerford412@gmail.com>
Sent: Thursday, June 18, 2020 1:09 PM
To: Stacey Pfaltzgraff
Subject: re: Comment for June 23 virtual hearing on Ranson zoning

CAUTION: External Email

To the leaders of Ranson:

We are writing on behalf of our entire family. We moved to Ranson nearly a decade ago and we appreciate the significant improvements made in the city, from additional sidewalks and crosswalks to the upgraded Fairfax Boulevard to a more vibrant Ranson Civic Center to the many economic development projects.

Ranson is a terrific place to live and work, and a well-run city. We are grateful for the work of our mayor, council members, city employees and volunteers.

As far as the zoning of the Rockwool parcel, we are in full support. Most of those who oppose the Rockwool factory don't live in Ranson and apparently do not care if there are jobs in our area that pay a liveable wage. We want this factory and these jobs.

Sadly, the Rockwool opponents were not paying attention to the affairs of Ranson or the county prior to the groundbreaking ceremony held in June of 2018. When they heard about the factory, they reacted with outrage and alarm, but they were wrong to say Rockwool would be a danger. They remain misguided to this day about the potential "dangers" of this factory. They appear to be out for revenge against the city of Ranson and we are saddened to see them take this adversarial position.

I urge you to listen to those of us who were paying attention when the land was rezoned and the factory proposal approved. You all got it right the first time.

Sincerely,

Robert and Christine Snyder
 and children at home: Victoria, Claire, Gwen and Laura

Attachment: 20200623 - Written Comments - Packet #11 (1685 : Ordinance #2017-302)



Snyder Environmental Services, Inc.

270 Industrial Blvd.

Kearneysville, WV 25430

Phone: 304-725-9140 Fax: 304-728-7326

WV Contractors License #WV000270

June 23, 2020

Re: Ordinance #2017-302

Rezoning of "Jefferson Orchard" -Reallocating Transect Districts (District 8 , Tax Map 12, Parcel 1)

Dear Members of the Ranson City Council:

I speak today to support the rezoning of the Jefferson Orchard property to the industrial classification that will be supportive of the continued construction of the Rockwool plant at its current location.

The financial opportunity for the City of Ranson is truly amazing. The income for Ranson from the B&O tax alone provides a tremendous financial resource for the City of Ranson. Certainly, any Councilman who judges the rezoning issue must recognize the financial merit in voting to approve this rezoning. This rezoning is not just about Rockwool, it is also about every other business which may choose to locate on the Jefferson County Orchard Property in the future.

One may ask, why this location? The answer should be obvious. Large businesses need large space. The County Development Authority erred in creating too many small lots with too much road. They have nothing to offer large businesses. The Jefferson Orchard property offers what large businesses need. Highway access, water, sewer, rail access and a blank slate on land development.

Please also consider the effect of this issue on the economy of the United States. Our manufacturing base has been decimated by products being manufactured in Asia and India. This country cannot survive on a service industry culture. We need to bring industry back. Industry needs places to locate the manufacturing facilities to again make MADE IN THE USA important and sustaining for America.

Respectfully,

Lee Snyder, President



Joseph V. Schaeffer
304.291.7952
jschaeffer@spilmanlaw.com

June 18, 2020

Via Electronic Mail
Ranson City Council
c/o Stacey Pfaltzgraff
312 S. Mildred Street
Ranson, WV 25438
spfaltzgraff@ransonwv.us

Re: Proposed Ordinance #2017-302: "An Ordinance Amending and Re-Enacting the Official Zoning Map of the City of Ranson Pursuant to Ranson Municipal Code § 19-20 and Chapter 19A, Article 1: 'Jefferson Orchards' Reallocation Transect Districts (District 8, Tax Map 12, Parcel 1)"

Dear Members of the Ranson City Council:

On behalf of ROCKWOOL,¹ thank you for the opportunity to submit comments on Proposed Ordinance #2017-302. Adopting this ordinance would affirm your prior allocation of transect districts for the former Jefferson Orchards property. And it would keep the City's promises to ROCKWOOL, which relied on those transect districts when it made the decision to locate its facility there.

We expect that you will receive comments, many from persons who neither live in the City nor own property there, that in effect ask you to use this Proposed Ordinance as a referendum on ROCKWOOL; or its air permit; or its stormwater permit; or its building permits; or its recruitment to Jefferson County; or other factors underlying opposition to this particular project. They might even threaten to sue the City if their demands are refused (more on this later). The decision before you, however, rests on the answer to two narrow questions under West Virginia law:²

1. Is the allocation consistent with the 2012 Comprehensive Plan?
2. If the allocation is inconsistent, have there been major changes of an economic, physical or social nature within the area involved that were not anticipated when the 2012 Comprehensive Plan was adopted and that have substantially altered the basic characteristics of the area?

¹ ROCKWOOL is the trade name for Roxul USA, Inc.

² W. Va. Code § 8A-7-8(a).

Ranson City Council
 c/o Stacey Pfaltzgraff
 June 18, 2020
 Page 2 of 9



This is not the first time you have been called upon to answer these questions for Jefferson Orchards. You have done so twice before—once in 2012 and once in 2017. And each time you answered *yes* to the first question, finding that a Special District Industrial (SDI) transect was consistent with the 2012 Comprehensive Plan. These past decisions are instructive.

2012. The City overhauled its planning and zoning code in 2012. With the assistance of a consultant, Placemakers LLC, the City adopted the 2012 Comprehensive Plan and zoning Smart Code that would accompany it. Because the Smart Code would represent a sea change from the traditional use-based zoning, the City and Placemakers LLC solicited property owners to submit applications under the new Smart Code, thus allowing local residents to gain familiarity with the new concept.³ The then-owner of Jefferson Orchards was one of three property owners that agreed to serve as test subjects for the new Smart Code.⁴

With the consent of Jefferson Orchards' then-owner, the City and Placemakers LLC submitted a Land Development Plan and Plat Application (the Development Application)⁵ and a transect allocation request (the Allocation Request)⁶ on its behalf. This was an integral part of the 2012 Comprehensive Plan and Smart Code. The Allocation Request states that it was co-sponsored by the City "because of [Jefferson Orchards'] use as an illustrative site in shaping Chapter 19A of City Code."⁷ And both the Allocation Request and the Development Application appeared on the *Resources* tab of the RansonRenewed.com site, which had been created to guide City residents through the 2012 Comprehensive Plan and Smart Code process.⁸ Those documents still appear there today, long after they were approved and adopted in Spring 2012.⁹

Given the present discussion, two things about the Allocation Request, in particular, are worth noting. The first is that the City and Placemakers LLC allocated the SDI transect district to most of the western part of Jefferson Orchards—the same area where ROCKWOOL's facility is located today.¹⁰ And the second is that the 2012 Comprehensive Plan does not reveal any objection to this allocation from the approximately 400 people reported to have participated in the comprehensive planning process.¹¹

We can thus say that industrial use at Jefferson Orchards is not just consistent with the 2012 Comprehensive Plan, *but that it was expressly contemplated by the 2012 Comprehensive Plan from the start.*

³ Minutes of March 6, 2012, Ranson City Council Meeting, attached as Exhibit A.

⁴ *Id.*

⁵ March 16, 2012, Jefferson Orchards Land Development Plan and Plat Application, attached as Exhibit B.

⁶ March 11, 2012, Jefferson Orchards Chapter 19A Rezoning Request, attached as Exhibit C.

⁷ *Id.*

⁸ "Resources," City of Ranson, RansonRenewed.com, available at <http://ransonrenewed.com/resources/> (last accessed June 16, 2020)

⁹ *Id.*

¹⁰ March 11, 2012, Jefferson Orchards Chapter 19A Rezoning Request

¹¹ *See, e.g.*, 2012 Comprehensive Plan.

Ranson City Council
 c/o Stacey Pfaltzgraff
 June 18, 2020
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2017. In Summer 2017, Jefferson Orchards' then-owner asked the City to reallocate the transect districts to permit future development by extending the SDI transect to cover the entire western half of the property and consolidating two villages into a single medium-density village covering the eastern half of the property.¹² The City's planning department found the reallocation to be consistent with the 2012 Comprehensive Plan.¹³ The Planning Commission likewise found the reallocation to be consistent with the 2012 Comprehensive Plan, since Jefferson Orchards is located in a G3 Preferred Growth Sector, and it adopted Resolution #17-10 recommending that you approve the new transect district allocations.¹⁴ Relying on the same factors as the Planning Commission, you adopted this recommendation and approved the new transect district allocations in Ordinance #2017-302.¹⁵ These were the zoning changes that ROCKWOOL relied upon to then purchase part of Jefferson Orchards and begin construction on its facility.

Present. The allocation of transect districts for Jefferson Orchards is in front of you again because the Circuit Court of Jefferson County concluded that the City provided insufficient notice before adopting Ordinance #2017-302. Some groups opposing ROCKWOOL have misrepresented this conclusion, falsely claiming that it means that the transect districts allocated by Ordinance #2017-302 are void. But the Circuit Court reserved a ruling on the validity of those transect district allocations because ROCKWOOL has raised a number of defenses that might lead them to be enforced notwithstanding any notice defects in their adoption. The Circuit Court simply suggested—wisely, in our view—that the City could moot the dispute by readopting Ordinance #2017-302 after giving the court-determined notice.

We note that the group suing the City over the zoning for Jefferson Orchards has never alleged in Circuit Court that your adoption of Ordinance #2017-302 was inconsistent with the 2012 Comprehensive Plan; its claims have been limited to notice-based challenges. And in our view, you should have no doubts or hesitation that you would act consistently with the 2012 Comprehensive Plan by adopting Proposed Ordinance #2017-302 and affirming the prior transect district allocations. That Jefferson Orchards would support industrial uses was integral to the 2012 Comprehensive Plan, with the original allocation of the SDI transect supported by the City as a showcase for Smart Code zoning. And that the SDI transect might be expanded, as occurred in 2017, was contemplated by the inclusion of Jefferson Orchards in the G3 Preferred Growth Sector, which you cited in both 2012 and 2017 in support of industrial uses.

* * *

¹² July 17, 2017 Jefferson Orchards Revised Chapter 19A Rezoning Request, attached as Exhibit D.

¹³ August 8, 2017 Staff Report, attached as Exhibit E.

¹⁴ August 7, 2017, Planning Commission Resolution #17-10, attached as Exhibit F.

¹⁵ September 15, 2017, City Council Ordinance #2017-302, attached as Exhibit G.

Ranson City Council
 c/o Stacey Pfaltzgraff
 June 18, 2020
 Page 4 of 9



We think your prior findings are more than sufficient to find that Proposed Ordinance #2017-302 is consistent with the 2012 Comprehensive Plan. Nonetheless, there are additional aspects of the 2012 Comprehensive Plan that we believe put this conclusion beyond any reasonable doubt.

Land use. The City expressly contemplated that industrial uses would make up part of its land use plan development plan. One of the City's land-use objectives (Number 10) was to "encourage manufacturing and assembly-line facilities to locate in Ranson," with the City stating that it would "designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."¹⁶ The City also made the connection between industrial employment and shorter commutes when it identified as one of its land use actions "designat[ing] locations for industrial development to reduce travel time for employees."¹⁷ And recognizing that there is a place for everything and everything has its place,¹⁸ the City discussed how it would create special districts like the SDI that would encompass these industrial areas.¹⁹

To meet these objectives, the 2012 Comprehensive Plan twice identified Jefferson Orchards as the location for a relocated MARC station or "an Industrial Special Industrial District that would utilize the rail access."²⁰ It even included two proposed plans showing Jefferson Orchards if it were developed according to either option.²¹ And though the two plans are admittedly distinct, it is nonetheless notable that even the MARC-oriented plan contemplated "an industrial employment base."²²

Rarely is a comprehensive plan as clear about the intended land use for a specific parcel as the 2012 Comprehensive Plan is here about the intended industrial use for Jefferson Orchards.

Economic development. A central theme of the 2012 Comprehensive Plan was the need for the City to develop its economic base.²³ In the decade preceding its adoption, Ranson lost more than 1,500 jobs as major employers closed,²⁴ and 50% of employed persons were commuting to the D.C. area,²⁵ with about 39% of residents commuting²⁶ over 25 miles and 13% commuting over 50 miles.²⁷ The 2012 Comprehensive Plan recognizes that, for many people, these transportation

¹⁶ *Id.* at 31; *see also* 2012 Comprehensive Plan at 34. ("Growth requirements include: ... business parks including industrial").

¹⁷ *Id.* at 32.

¹⁸ 2012 Comprehensive Plan at 29.

¹⁹ *Id.* at 16.

²⁰ *Id.* at 30 & App. B. VII.

²¹ *Id.* at App. B XIV-XV.

²² *Id.* at App. B XIV.

²³ 2012 Comprehensive Plan 19.

²⁴ *Id.* at 92.

²⁵ *Id.* at 12.

²⁶ *Id.* at 92.

²⁷ *Id.* at 91.

Ranson City Council
 c/o Stacey Pfaltzgraff
 June 18, 2020
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costs are second only to housing costs,²⁸ and making employment opportunities available closer to home can not only make transportation and housing more affordable,²⁹ but can also increase residents' happiness.³⁰

The City included in its land-use objectives (Number 4) the need to "improve access to sites for a variety of jobs in the manufacturing technology, and services industries."³¹ Additionally, each of the City's economic objectives emphasized the need to generate new development that would create a multiplier effect. Objective 1 was to "get more money to circulate within Ranson";³² Objective 2 was to "[b]ring more money in from outside Ranson";³³ and Objective 3 was to "[g]et money to relocate to Ranson" by attracting "employment centers including headquarters and manufacturing."³⁴ The City thus identified the need to "encourage industrial and larger-format uses in appropriate areas, including ... large industrial / commercial uses."³⁵ The SDI district under the zoning Smart Code was developed for these uses "to increase long term return on investment."³⁶ And by designating Jefferson Orchards as one of seven brownfields for redevelopment, the 2012 Comprehensive Plan again makes plain its intent for this property to fulfill the broader economic objectives.

Brownfield redevelopment. In addition to designating Jefferson Orchards as a brownfield, the City identified as one of its land-use objectives (Number 2) the "redevelop[ment of] the City's brownfield sites" so they provide a net benefit.³⁷ It also included "promot[ing] redevelopment of the City's brownfield sites" as a specific redevelopment and renewal objective (Number 2).³⁸ Allocating transect districts to permit Jefferson Orchards' redevelopment thus supports these objectives from the 2012 Comprehensive Plan.

Utilities. The City's public water objectives (Number 3) identified a need for adequate water service,³⁹ with a specific reference to preparing for brownfield redevelopment.⁴⁰ And the City's sewer objectives (Number 2) likewise identified a need for adequate sewer service,⁴¹ again with a specific reference to preparing for brownfield redevelopment.⁴² Both of these objectives are furthered by permitting industrial uses that generally are in a better position to bear infrastructure costs than other types of uses.

²⁸ *Id.* at 39.

²⁹ *Id.*

³⁰ *Id.* at 14.

³¹ *Id.* at 30.

³² *Id.* at 99.

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* at 100.

³⁶ *Id.*

³⁷ *Id.* at 30.

³⁸ *Id.* at 35.

³⁹ *Id.* at 71.

⁴⁰ *Id.*

⁴¹ *Id.* at 73.

⁴² *Id.*

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In sum, we believe that the proposed transect district allocation for Jefferson Orchards supports at least nine objectives under the 2012 Comprehensive Plan:

- General Land Use Objective 2: Redevelop the City's brownfield sites⁴³
- General Land Use Objective 4: Improve access to sites for a variety of jobs in the manufacturing, technology, and service industries⁴⁴
- General Land Use Objective 10: Encourage manufacturing and assembly-line facilities to locate in Ranson⁴⁵
- Redevelopment and Renewal Objective 2: Promote redevelopment of the City's brownfield sites.⁴⁶
- Economic Objective 1: Get more money to circulate within Ranson⁴⁷
- Economic Objective 2: Bring money in from outside Ranson⁴⁸
- Economic Objective 3: Get money to relocate to Ranson⁴⁹
- Public Water Objective 3: Work with public utilities to assure the evolving needs of Ranson's redevelopment and new development are adequately met and consolidate service delivery where economically feasible⁵⁰
- Sanitary Sewer Objective 2: Ensure the sanitary sewer infrastructure is available for future growth by promoting the efficiency of the sanitary sewer systems through careful phasing, careful design of the system's layout, and conservation.⁵¹

* * *

Although land use decisions are considered against a universe of potential users, rather than in the context of one specific user, we note how well ROCKWOOL's facility serves the preceding objectives from the 2012 Comprehensive Plan.

ROCKWOOL has already remediated one of the City's former brownfield sites and committed more than \$15 million to extend water and sewer service to its property—further benefitting numerous other City and county residents, businesses, and schools in the process. Business and occupancy (B&O) taxes from construction generated \$1.5 million in revenue for the City, and lifetime B&O taxes from the facility's operations are expected to vastly exceed this figure. You can also expect the facility to generate significant property tax revenue over its lifetime. Beyond these direct impacts, experience tells us that construction has been responsible for significant indirect economic impacts, and the same will be true for the facility once it starts production. Finally,

⁴³ *Id.* at 30.

⁴⁴ *Id.*

⁴⁵ *Id.* at 31.

⁴⁶ *Id.* at 35.

⁴⁷ *Id.* at 99.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.* at 71.

⁵¹ *Id.* at 73.

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ROCKWOOL's facility means that residents will have stable and competitive-paying jobs in their own community—no small matter when the City's own data estimates that about 50% of employed persons are commuting to the D.C. area for work.

* * *

We expect that many commenters will ignore the 2012 Comprehensive Plan guiding your decision—or else misunderstand its application here. Your attorney was therefore correct when, during your June 16, 2020, meeting, he counseled you to disregard objections that ask you to consider matters unrelated to land use or that contradict the 2012 Comprehensive Plan. Even so, we believe several issues are worth addressing briefly here.

Health, safety, or welfare. A postscript to General Land Use Objective 10 in the 2012 Comprehensive Plan states, that industrial facilities should not adversely affect community's health, safety, or welfare.⁵² And we expect some commenters to argue that this should prohibit industrial development within the City. They are wrong. The postscript is simply an expression of one of the City's community design principles: "A place for everything, and everything in its place."⁵³ And on that point, we note that both the City and its consultant specifically identified the Jefferson Orchards property for industrial use—and to our knowledge, none of the 400 people participating in the development of the 2012 Comprehensive Plan objected. What's more, ROCKWOOL has successfully completed multiple regulatory and permitting processes that are intended, among other things, to protect human health and the environment

Air quality. The ROCKWOOL air permit must comply with regulations issued by the U.S. Environmental Protection Agency (EPA) and administered by the West Virginia Department of Environmental Protection (DEP). These regulations are designed, among other things, to protect the health of sensitive populations, including children, asthmatics, and the elderly. The DEP published notice of the ROCKWOOL air permit application (on an above-average circulation day) in the *Spirit of Jefferson* and, further, e-mailed an additional 500+ individuals and organizations. No local citizens or organizations commented, and there were no objections or appeals filed after the air permit was granted. EPA, however, took the additional step of subjecting the facility to its environmental justice tool, EJSCREEN, and found no cause for objection. Even so, ROCKWOOL has funded two air monitoring stations and one weather station, whose results are being made available to the public via the internet.

Water. Industry and karst terrain can safely coexist; you need only consider the industrial uses in karst terrain across the Eastern Panhandle and surrounding region. ROCKWOOL recognizes, however, that karst terrain requires additional precautions, and it has worked with experts to meet or exceed all regulatory requirements. Among other things, the company performed a detailed karst survey before starting construction, designed a closed loop system for its production

⁵² *Id.* at 31.

⁵³ *Id.* at 32.

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process water, and exceeded regulatory requirements for the rainwater and stormwater retention ponds.

Brownfields. Historic use of pesticides had led Jefferson Orchards to be designated as a brownfield by the time ROCKWOOL purchased it. Under the auspices of West Virginia's Voluntary Remediation Program, ROCKWOOL has since remediated Jefferson Orchards to be protective of human health under its intended industrial use. It has also agreed with DEP to record a restrictive covenant limiting Jefferson Orchards to non-residential uses.

Environmental racism. Last summer, descendants of persons interred at the Boyd Carter Memorial Cemetery made ROCKWOOL aware that some gravesites might be located outside the Cemetery's boundaries. ROCKWOOL has since repeatedly attempted to engage with the Cemetery's trustees to protect any unmarked gravesites and honor their ancestors' memories, and it remains open to further discussions.

Schools. ROCKWOOL's facility is separated from the nearest school, North Jefferson Elementary, by railroad tracks, the four-lane WV-Route 9, and the two-lane WV-Route 115. Its chimneys are more than 0.6 miles away from North Jefferson Elementary—beyond the approximately ½ mile screening radius that EPA has suggested for school siting.⁵⁴ Even so, EPA took the additional step of considering our air permit against the EJSCREEN criteria and reported no objections to the facility's siting.

Equine populations. Based on local concerns, ROCKWOOL voluntarily conducted air modeling on the expected PM2.5 (particulate matter, 2.5 microns) impacts at the Charles Town Race Track. The analysis showed that the facility's contribution to the PM2.5 annual average around the race track is expected to be less than 1% of the existing background values and about 0.3% of the level considered safe for sensitive human populations.

What's more, horses and horse-raising coexisted with industrial uses even before the current era of stringent air permitting requirements. Neighboring Loudon County maintains a thriving equine industry despite the location of Dulles Airport along its border with Fairfax County. There is every reason to believe that ROCKWOOL and the equine industry will coexist here, too.

Lawsuits. As a final point, we note that one of the groups opposing ROCKWOOL's facility took out an ad in the June 10, 2020, edition of the *Spirit of Jefferson* in which it contrasted the adoption of Proposed Ordinance #2017-302 with thinly-veiled threats of future legal action. We see this for what it is—an effort to obtain by threat of lawsuit what it cannot obtain under the law—and are disappointed by the attempt. We have no doubt that Ranson will likewise see this for what it is and refuse to be deterred from its obligation to follow the law.

* * *

⁵⁴ U.S. EPA, School Siting Guidelines 58 (Oct. 2011).

Ranson City Council
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Proposed Ordinance #2017-302 presents you with a narrow, yet straightforward question: are the proposed transect districts for Jefferson Orchards, including the SDI district for ROCKWOOL's facility, consistent with the 2012 Comprehensive Plan? The answer is clearly *yes*. There are nine planning objectives supporting this allocation, the City specifically planned for it in the 2012 Comprehensive Plan, and its twice zoned for it—once in 2012 and once in 2017. ROCKWOOL's proposed use of Jefferson Orchards is simply the fulfillment of this long-standing plan, and it comes with enormous benefits to the City in terms of increased tax revenues, improved utilities, and broader economic development.

At bottom, ROCKWOOL remains committed to the City, and we ask that you show that same commitment by fulfilling the promise begun in 2017 and adopting Proposed Ordinance #2017-302.

Thank you for your attention.

Very truly yours,



Joseph V. Schaeffer

JVS:
Enclosures
cc:

13091298

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

EXHIBIT A

**CITY COUNCIL MEETING
TUESDAY, MARCH 6, 2012**

AGENDA ITEM I - CALL TO ORDER:

Mayor Hamill called this meeting to order at 7:00 p.m.

AGENDA ITEM II - MEMBERS PRESENT:

Mayor Hamill reported all Council Members present Donnie Haines, Tony Braithwaite, Debbie McClure, Dave Cheshire, Duke Pierson, and Scott Coulter. Also, present were Acting City Manager Andy Blake, Chief William Roper, Economic Development Director Dave Mills, City Clerk Stacey A. Dodson Pfaltzgraff, Finance Director Chris Bontoft, Planning Director Sarah Kleckner, and Public Works Director Bill Silveous.

AGENDA ITEM III – APPROVAL OF MINUTES

Minutes of the February 21st, 2012, Council Meeting was presented for approval. Motion was made by Council Member Haines to dispense with the reading of the minutes. Motion was seconded by Council Member Coulter. No discussion. Motion passed unanimously.

Motion was made by Council Member Cheshire that the minutes be approved as submitted. Motion was seconded by Council Member McClure. No discussion. Motion passed unanimously.

AGENDA ITEM IV – CITIZEN'S PRESENTATIONS/PETITIONS

1. Judy Ashelman was present to discuss the 2nd Phase of the 3rd Avenue Revitalization Gardening Plan. Also present were volunteers William Gregg, Ecologist and Susan Weimer, Resident. Mrs. Ashelman stated that she had spoken with Public Works Director Bill Silveous requesting the City's services to dig the trenches for the arborvitae trees, to be planted at said site, which when full-grown would be approximately 25 feet to 30 feet in height. Total funding requested by Mrs. Ashelman for the continued maintenance of the project would be between \$350.00 to \$400.00. Council Member Pierson suggested that the funding be provided by the Parks & Recreation Commission, due to the location of the project being situated at the Ranson Civic Center. Council Members thanked Mrs. Ashelman for her dedication and volunteer contributions to the City.
2. CVB Director Cheryl Mills was present to provide Council with an updated report for the Ranson Convention & Visitors Bureau. Mrs. Mills provided several hand-outs to Council, which included Total Revenues and Expenditures for FY 2010-2011 and FY 2011-2012; 2011 Log of Collateral Mailed; Ranson Visitor Center Guest Book Sign-In Log; Contract for 2012 WVACB Trade Shows; and a Projected Marketing Plan, which included goals and objectives for the bureau. Mrs. Mills continued by reporting that the CVB had been officially open for 2 years. She stated that the bureau had been reaching out to the regional area, which included Virginia, Maryland, Pennsylvania, New York, New Jersey, and Delaware to try and promote tourism in Ranson. She stated that Ranson now had its own Destination Guide for visitors in the City. Also, the WV State Travel Guide, which is affiliated with the Division of Tourism, is distributed to approximately 350,000 people including hotels and that the Guide was a wonderful tool for reaching out to prospective tourists. Mrs. Mills continued her report by stating that the bureau was certified, but not accredited, due to the current structure of the Board. To be accredited, would require more individuals who are directly affiliated with tourism serve on the Board, such as members of the Arts & Humanity Alliance, Chamber of Commerce, and the Historical Society.

In conclusion Mrs. Mills reported that the bureau was working on an Itinerary Package, which would be available to individuals wishing to visit the area and would include meals, accommodations, and themes such as Need for Speed, History & Culture, and Adventure, which would include such activities as the Hollywood Casino, Summit Point Raceway, River Rides, and Zip Lining. Also, the goal to have 1 elaborate concert in place of the 1st Friday Concert Series was under discussion. Mrs. Mills closed by asking for any comments or questions.

AGENDA ITEM V – COUNCIL/COMMITTEE ANNOUNCEMENTS

Ordinance – Council Member Coulter reported that several Ordinances had been revised and others would be undergoing revisions, for Council approval, due to implementation of the new Smart Code concept.

Planning & Zoning – Council Member Haines reported that the EPA Area-Wide Report was presented at the March 5th Planning Commission meeting and that the Chamber was filled with attendees. He reported that all comments made during the meeting were very encouraging and positive. Council Member Haines stated that there would be a Special Meeting held on March 26th.

AGENDA ITEM VI – CITY MANAGER/STAFF REPORTS

- A. Chief Roper provided Council with the department's Status Report for February 2012, which included a total of 579 calls for the month, a list of Arrests, Citations, Parking Tickets, and Warnings; Gas Log for February 2012; 2011-2012 Comparison Sheet; and an Accident, Crime, and Impound Log Report. Next, Chief Roper reported that a Traffic Study was being conducted at Fairfax Crossing and would continue at various locations throughout the City. Chief Roper concluded by stating that he had been working with Principal Debra Corbett at Ranson Elementary School to implement a Public Safety Mascot for the City of Ranson. Three 5th grade students had created their own drawings and concept of the Fox. The slogan would be *Smart as a Fox* to try and encourage public safety with the youth and seniors in the City and promote more awareness about scams, disasters, and the like. Chief Roper stated that he would not be in attendance at the March 20th Council Meeting, due to his attendance at a Credentialing meeting on March 20th, 21st, and 22nd in Arlington, VA.
- B. Acting City Manager Andy Blake provided updates on the following projects: Planning Commission was continuing to review the working documents for the Comprehensive Plan and the new Zoning Ordinance. He stated that all documents were available on the City's web site. A Special Meeting was being held on March 26th for final discussion covering the Comprehensive Plan and Zoning Study. Mr. Blake stated that owners of 3 properties, namely Jefferson Orchards, Clayhill Farms, and Fairfax Crossing had agreed to participate in the new Zoning concept. Mr. Blake stated that the 1st Readings and Public Hearings would take place on April 3rd and then the 2nd Readings would occur on April 17th, 2012. Next, Mr. Blake reviewed the Budget Documents with Council, which included employee salaries, wages, and fringe benefits as requested by Council. Mr. Blake stated that he, along with Finance Director Chris Bontoft and City Clerk/HR Representative Stacey Pfaltzgraff, had prepared a Draft Pay Scale, which included titles and current salaries, along with a Step and Grade Scale. Mr. Blake reported that revenues were flat and he did not want to commit the City to the Pay Scale at this time, but that based on unencumbered funds at the end of the fiscal year, staff recommended a one-time salary adjustment in the amount of \$2,080.00 to each full-time employee. Mr. Blake continued by stating that there had been a 21% reduction in staff, along with a \$591,000.00 salary reduction between 2008 and 2012, due to elimination of the Sanitation Department, along with not hiring individuals to fill the positions of those no longer working full-

time with the City. That of course placed a heavier burden on current staff, but staff had been able to manage the additional duties and responsibilities. Mr. Blake reminded Council that in 2008 Council stated that they had wanted to focus on the Stabilization Fund, Capital Fund, and Strong Reserves, eliminating capital when necessary, but not operations. Also, a \$140,000.00 savings in liability and workers' compensation premiums had occurred. Council Member Coulter stressed the importance of not relying on the Video Lottery and Table Games as revenue. Council Member Pierson stated that the City needed a Contingency Plan, if the Video Lottery was no longer in existence. Mr. Blake stated that he would like to have a workshop during the summer of 2012 to discuss said Contingency Plan and discuss what Council would like to do with the drafted Pay Scale. Council Member Pierson also stated that several residents had been inquiring about the meeting with Ranson Estates to discuss the current parking conditions. Possible options could be one-way parking or no parking, but would further be discussed during the month of April.

- C. Economic Development Director Dave Mills reported that Mr. Blake had covered all that was occurring with the EDA and that he was continuing to do Plan Review with the Authority.

AGENDA ITEM VII - COMMUNICATIONS WITH THE ACTING CITY MANAGER

AGENDA ITEM VIII - COMMUNICATIONS FROM THE MAYOR

Mayor Hamill wanted to clarify if it was appropriate for him to sign the Letters of Support prior to presenting to Council, for such organizations as Squared Circle, LLC and Friends of Big Mikes, which hold events at the Ranson Civic Center. Council Member Pierson stated that it had been previously discussed by the Parks & Recreation Commission to sign the letters with contingency that the organizations would acquire the liquor license required by the State for such an event within the 30 day time-frame. Also, the up-coming Squared Circle, LLC Boxing Event for the spring had been canceled. Mayor Hamill concluded by reminding all Council Members about the up-coming Grand Opening of the Hampton Inn & Suites at 157 Pimlico Drive on Wednesday, March 21st at 5:00 pm.

AGENDA ITEM IX - COUNCIL BUSINESS

1. **Special Activity Permit - Animal Welfare Society of Jefferson County - Roadside Collection - Jane Turner** requested Council's approval to have a Roadside Collection on Saturday, August 18th from 8:30 am until 12:30 pm in front of Southern States. Purpose: To generate revenue for shelter and animals residing at the shelter. Motion was made by Council Member Braithwaite to approve said Special Activity Permit. Motion was seconded by Council Member McClure. No discussion. Motion passed unanimously.
2. **Resolution #2012-05 - A Resolution of the City Council of the City of Ranson** adopting the Jefferson County Emergency Operations Plan pursuant to the State Emergency Services Act (West Virginia Code, Chapter 15, Article 5, as amended, (15-5-8) provides that "each political subdivision" of this state is hereby authorized and directed to establish a local organization for Emergency Services - The purpose of said resolution was to approve and adopt the provisions of the document known as the *Jefferson County Emergency Operations Plan* to provide protection and assistance to its citizens in case of disaster; and to combine respective resources and response for disaster assistance with the Jefferson County Commission. Motion was made by Council Member Pierson to approve Resolution #2012-05. Motion was seconded by Council Member McClure. No discussion. Motion passed unanimously.

3. **Resolution #2012-06** - A Resolution of the City Council of the City of Ranson authorizing the Mayor or his Designee to enter into the Jefferson County Homeland Security and Emergency Management Citizen Corps Partnership Agreement - The purpose of said resolution was to recognize the City's role in the community and its importance to the welfare of the people and institutions; and to endorse the goals of Jefferson County Homeland Security and Emergency Management and the achievement of those goals in appropriate ways through a framework of Whole Community Emergency Management. Motion was made by Council Member Cheshire to approve Resolution #2012-06. Motion was seconded by Council Member Coulter. No discussion. Motion passed unanimously.

4. **Resolution #2012-07** - A Resolution of the City of Ranson Supporting TIGER Application for Grant Funding for the "Ranson-Charles Town Green Corridor Revitalization" - The purpose of said resolution was to support the improvement of Fairfax Boulevard into a complete, green street that promotes transportation choices, walkability, and sustainable development in downtown, Ranson neighborhoods, and other areas connected to the City and to improve North George Street, along with restoration and revitalization of the public building known as Charles Washington Hall into the Charles Town Commuter Center to provide commuters in the broader region with better options to utilize PanTran public transit buses, MARC rail commuter trains, and Amtrak's rail system. Motion was made by Council Member Haines to approve Resolution #2012-07. Motion was seconded by Council Member Cheshire. Discussion. Motion passed unanimously.

AGENDA ITEM X - ADJOURNMENT:

Motion was made by Council Member Braithwaite to adjourn into executive session. Motion was seconded by Council Member Pierson. No discussion. Motion passed unanimously. Council Meeting adjourned into executive session at 8:05 pm.

The next Regular Council Meeting was scheduled for Tuesday, March 20th, 2012, at 7:00 pm.


Tony Braithwaite, Recorder


A. David Hamill, Mayor

EXHIBIT B



J E F F E R S O N O R C H A R D
Ranson, West Virginia
LAND DEVELOPMENT PLAN AND PLAT APPLICATION
MARCH 16, 2012



Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

OWNER / APPLICANT
 Jefferson Orchards Inc.
 Tax Map 4, Parcel 26
 Deed Book 284 Page 460
 Middleway District
 Jefferson county, West Virginia

APPLICATION PREPARATION
 PlaceMakers, LLC
 5136 Sevilla Ave NW
 Albuquerque, NM 87120

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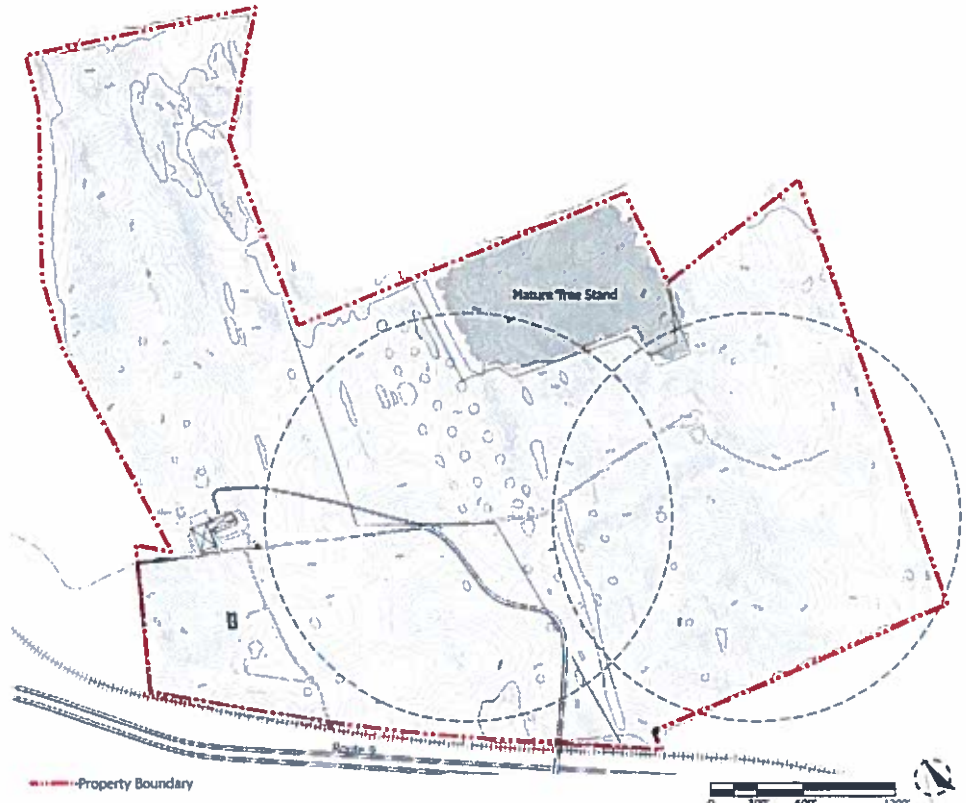
Existing Zoning	2
General Information	2
Existing Conditions: Topography	3
Existing Conditions: Soils	4
Community Unit Types	5
Transect Districts	6
Thoroughfares and Block Structure	7
Lot Structure	8
Thoroughfares	9
Civic Standards	10
Stormwater and Utilities	12





LOCATION MAP SCALE: 1" = 2,000'

PRESERVATION:
 The existing mature tree stand on the north of the site will be preserved for a community amenity.
 The T2 areas on the perimeter of the site are existing orchards and/or orchard planting patterns that will be developed as an amenity and contribute to the historical character of the community.



Property Boundary

EXISTING CONDITIONS: TOPOGRAPHY Scale 1" = 600'

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 LAND DEVELOPMENT PLAN & PLAT APPLICATION
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Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)



Soil Unit Symbol	Soil Unit Name	Acres in ACI	Percent of ACI
Fk	Fountain silt loam	14.7	3.8%
HeB	Hagerstown silt loam, 3 to 8 percent slopes, very rocky	64.2	34.8%
HxC	Hagerstown silt loam 8 to 15 percent slopes, very rocky	181.9	42.1%
HeC	Hagerstown flack outcrop complex, 8 to 16 percent slopes	61.4	13.4%
PpB	Poplar silt loam, 3 to 8 percent slopes, very rocky	0.7	0.2%
VeC	Vertrees silt loam, 8 to 13 percent slopes	24.9	6.4%
VtB	Vertrees silt loam, 3 to 8 percent slopes, very rocky	16.3	4.2%
VtC	Vertrees silt loam, 8 to 18 percent slopes, very rocky	12.2	3.2%
VtC	Vertrees-Rock outcrop complex, 8 to 15 percent slopes	8.8	2.3%
Totals for Area of Interest		384.7	100.0%

JEFFERSON ORCHARD RANSON, WEST VIRGINIA
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EXISTING CONDITIONS: SOIL!
 Scale 1" = 60'

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

3.3 Community Unit Types

3.3.2 Village (VIL)

a. A village (VIL) shall be permitted within the G-2 Controlled Growth Sector, the G-3 Intended Growth Sector, and the G-4 Infill Growth Sector.

Property in G-3 Intended Growth Sector

b. A VIL within the G-2 Controlled Growth Sector and the G-3 Intended Growth Sector shall be structured by one short, standard or linear pedestrian shed and shall be no fewer than 40 acres and no more than 200 acres, as allocated on Table 2. See Article 4 for Infill VIL acreage requirements in the G-4 Infill Growth Sector.

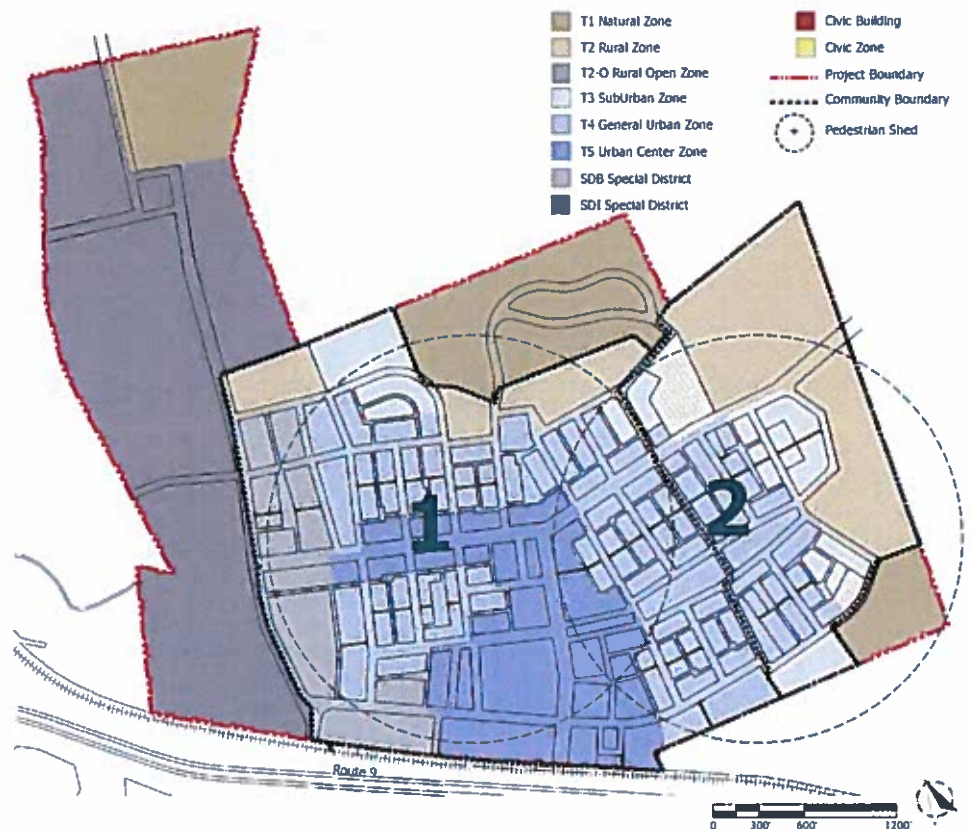
Community 1 - Village (High): 170.8 acres

Community 2 - Village (Low): 75.0 acres

d. Larger sites shall be designed and developed as multiple communities, each subject to the individual Transect District requirements for its type as allocated on Table 3. The simultaneous planning of adjacent parcels is encouraged.



SECTOR PLAN
 G2 - Controlled Growth
 G3 - Intended Growth
 City Limits



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COMMUNITY UNIT TYPES
 N.T.S.
 5

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

3.4 Transect Districts

3.4.1 Transect District subdistricts shall be assigned and mapped on each new community regulating plan according to the percentages allocated on Table 3.

Table 3 Compliance:

COMMUNITY 1: VILLAGE – HIGH INTENSITY

TRANSECT ZONE COMPLIANCE			
T-zones	Acreage	Percentage	REQUIRED
T2	14.0	8.2%	30% max.
T2O	0		0
T3	9.7	5.7%	20% max.
T4	70.7	41.4%	40 – 60%
T5	49.7	29.1%	10 – 30%
SDB	26.7	15.6%	20% max.
Net Site Area	170.8	100.0%	

COMMUNITY 2: VILLAGE – LOW INTENSITY

TRANSECT ZONE COMPLIANCE			
T-zones	Acreage	Percentage	REQUIRED
T2	34.7	46.3%	50% max.
T2O	5.5	7.3%	50% max. *
T3	14.0	18.7%	10 – 30%
T4	20.8	27.7%**	30 – 60%
T5	0	0	20% max.
Net Site Area	75.0	100.0%	

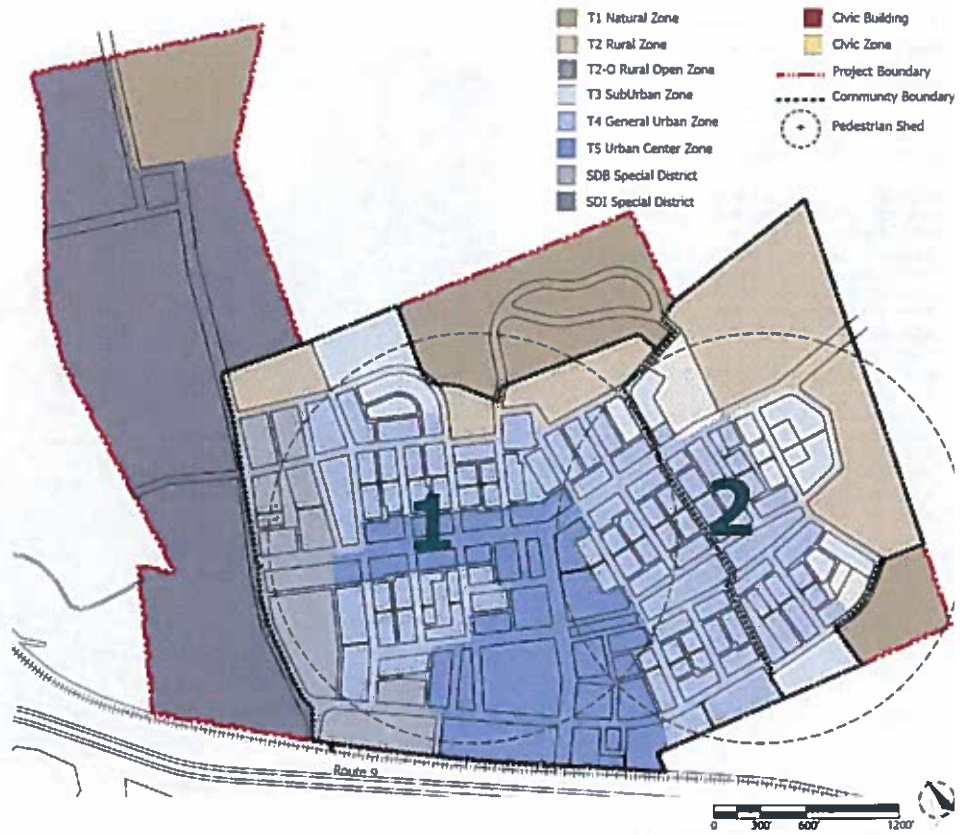
AREA OUTSIDE OF ADJUSTED PEDESTRIAN SHEDS

TRANSECT ZONE COMPLIANCE			
T-zones	Acreage	Percentage	REQUIRED
T1	50.1		N/A
SDI	95.4		N/A

* Note: Village T2-O maximums may contribute to T4 minimums

** For Community 2:

$T2-O + T4 = 5.5ac + 20.8ac = 26.3ac$, which is 35.1%



JEFFERSON ORCHARD RANSON, WEST VIRGINIA
 LAND DEVELOPMENT PLAN & PLAT APPLICATION
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TRANSECT DISTRICT
 Scale 1"=60'

3.5 Thoroughfares and Block Standards

3.5.1 The thoroughfare network shall be structured to define blocks with the following maximum block face lengths and block perimeters:

- a. T2D 660 ft. max / perimeter n/a
- b. T3 2640 ft. perimeter
- c. T4 2400 ft. perimeter
- d. T5 2000 ft. perimeter

3.5.2 Block faces exceeding 500 feet shall be subdivided with a pedestrian passage that is a minimum of 8 ft. in width.

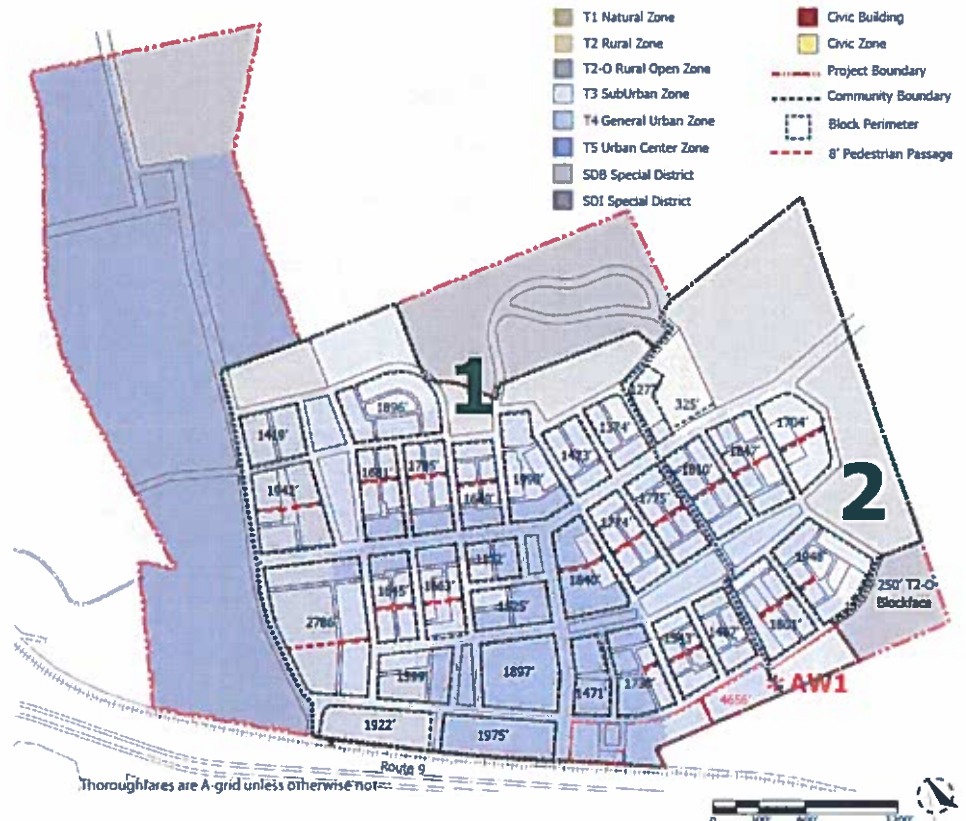
3.5.3 Blocks adjacent to undeveloped land, areas unsuitable for development, or pre-existing incomplete blocks may be exempt from block face length and block perimeter requirements by administrative waiver.

3.5.5 Rear access for all lots within T4 shall be provided by a rear lane or rear alley.

3.5.6 Rear access for all lots within T5 shall be provided by a rear alley.

3.5.7 Blocks with more than one Transect District designation shall use the highest designation to determine the block face length, block perimeter, and rear alley or rear lane requirements.

* Administrative Waiver #1 per 3.5.3 for edge condition with existing thoroughfares



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THOROUGHFARES AND BLOCK STRUCTURE
 Scale 1" = 600'

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

3.6 Lot Structure

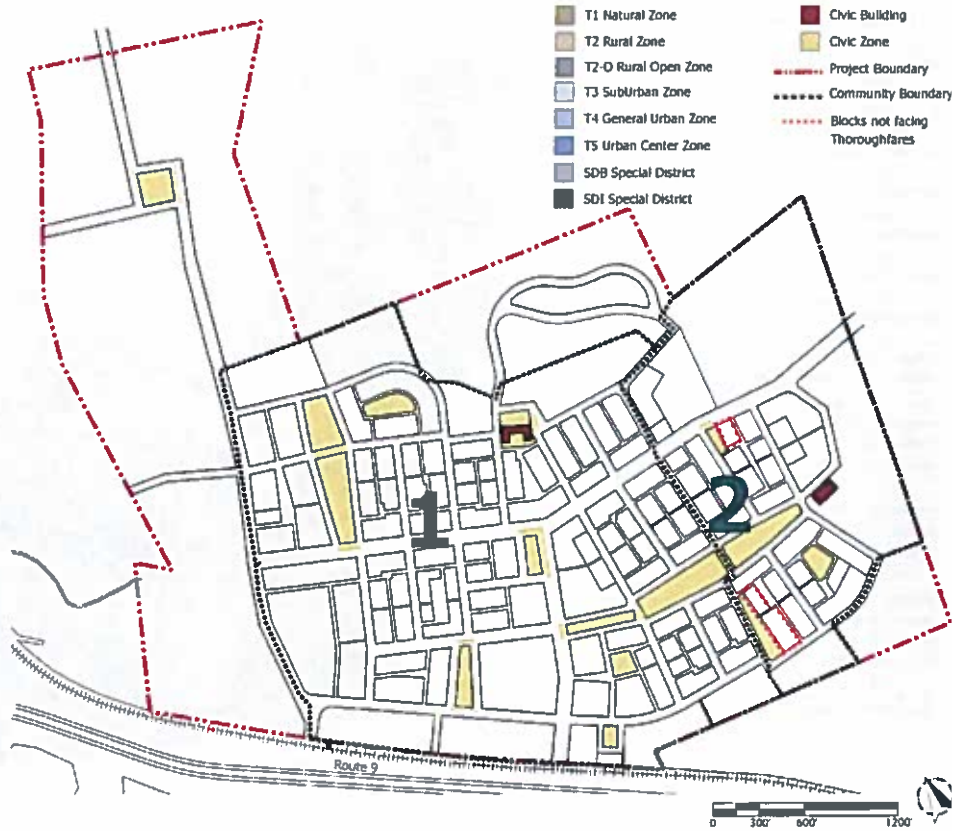
3.6.1 Within each Transect District, lots shall be platted to have the following minimum and maximum lot widths, measured at the frontage line:

- a. T2O 40 ft. min. - 96 ft. max. Flag lots shall be permitted. (See Table 16.)
- b. T3 50 ft. min. - 150 ft. max.
- c. T4 20 ft. min. - 96 ft. max.
- d. T5 20 ft. min. - 150 ft. max.

3.6.2 Each lot shall have a primary frontage abutting a vehicular thoroughfare, except that 20% of the lots by number within the SC-NC District may have their primary frontage along a publicly accessible passage, or sidewalk. Rear alleys and rear lanes do not count as thoroughfares. If a lot fronts an alley or lane, such as a mews unit, it counts toward the 20% maximum.

3.6.3 Lots may have multiple frontages as illustrated on Table 17. One frontage line is designated the principal frontage line and all remaining frontage lines are designated as secondary.

VILLAGE 2: LOTS NOT FACING THOROUGHFARE		
Area	Area of Lots not facing Thoroughfare	Percentage
75.0	1.5	2.0%



JEFFERSON ORCHARD RANSON, WEST VIRGINIA
 LAND DEVELOPMENT PLAN & PLAT APPLICATION
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LOT STRUCTURE
 Scale 1" = 60'

3.7 Thoroughfare Network Standards

3.7.1 Community plans must map a thoroughfare network plan including the following:

a. The major thoroughfare network

b. Modifications to existing thoroughfares, if any

3.7.3 The thoroughfare network plan must map thoroughfares and intersections according to Section 3.5.1.

a. Thoroughfare assemblies must be included for each mapped thoroughfare in accordance with Article 7.

b. All thoroughfares must connect to other thoroughfares, forming a network.

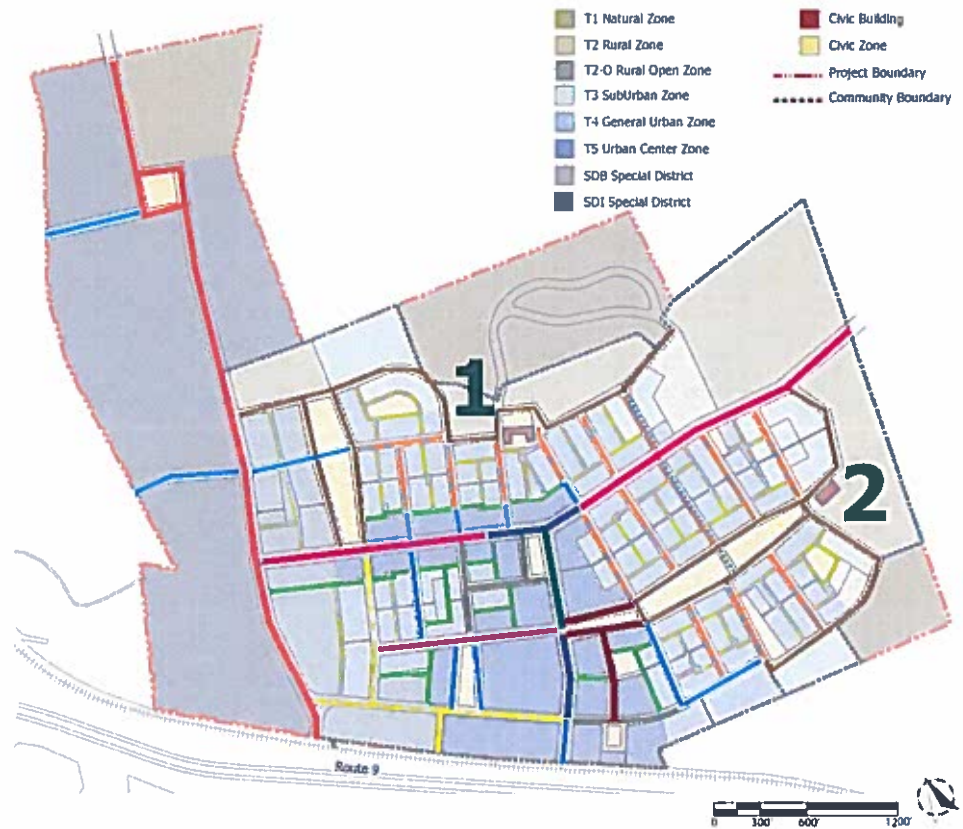
c. New thoroughfares must connect wherever possible to thoroughfares outside of the community unit.

d. The thoroughfares must be configured as a network creating blocks sized according to Section 3.5.1.

e. The thoroughfares may deviate from the network outside of the pedestrian shed, to accommodate natural conditions, and to intersect major thoroughfares.

Key	Thoroughfare	Approved T-zones
	AV 100-58	T3, T4, T4O
	CAV-100-58	T4O, T5
	CAV-100-40	T4, T4O
	CAV-66-36	T4, T4O, T5
	CS-82-60	T4O, T5
	CS-60-36	T4O, T5
	ST-58-36	T2O, T4, T4O, T5
	ST-54-32	T3, T4
	DR-50-28	T2, T3, T4
	ST-70-42*	SD (see page 13)
	ST-8-20*	T5 (see page 13)
	RA-24-24	T4, T4O, T5L, T5
	RL-20-10	T2O, T3, T4

*Proposed New Assemblies - see page 13



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THOROUGHFARES
 Scale 1" = 600'

3.8 Civic Standards

3.8.1 Civic Space (CS) Specific to T3 - T5 Districts

a. Each pedestrian shed shall assign 5 - 20% of its urbanized area to civic space

Village 1:

Total Civic Space	16.4 acres
Urbanized acres	170.8 acres
Urbanized area % Civic	9.6%

Village 2:

Total Civic Space	5.0 acres
Urbanized acres	75.0 acres
Urbanized area % Civic	6.7%

b. Civic spaces shall be designed as described and distributed throughout Transect District as permitted in Table 31.

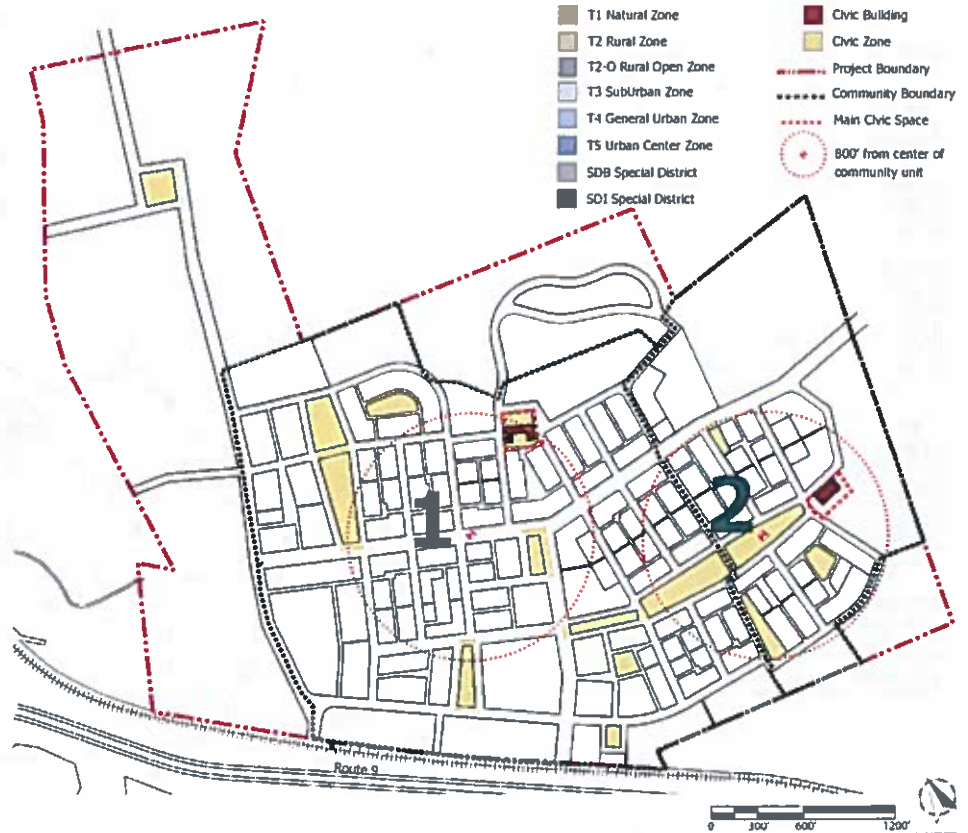
d. Each pedestrian shed shall contain at least one main civic space. The main civic space shall be within 800 feet of the geographic center of each pedestrian shed, unless topographic conditions, pre-existing thoroughfare alignments or other circumstances prevent such location. A main civic space shall conform to one of the types specified in Table 31.b, Table 31.c, or Table 31.d.

f. Each civic space of type Table 31.c or Table 31.d shall have a minimum of 50% of its perimeter fronting a Thoroughfare.

3.8.2 Civic Buildings (CB) Specific to T20 - T5 Districts

a. The owner shall covenant to construct a meeting hall or a third place in proximity to the main civic space of each pedestrian shed. Its corresponding public frontage shall be equipped with a shelter and bench for a transit stop, if on an existing or planned transit route.

b. Civic building sites shall not occupy more than 20% of the area of each pedestrian shed.



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CIVIC STANDARD
 Scale 1" = 60'

3.8 Civic Standards

e. Playgrounds shall be located so that every residential lot is within 1,000 feet of an entry to a playground, as measured along sidewalks that do not cross major thoroughfares. A playground shall conform to Table 31.e.

f. Each civic space of type Table 31.c or Table 31.d shall have a minimum of 50% of its perimeter fronting a Thoroughfare.

Village 1:

CS	Permitted Area	Area	Perimeter	Type	Permitted T-zone	T-zone
1a	5 - 8	2.1	NA	Green	T1 - T4	T4
1b	Any	0.7	NA	Community Garden	Any	T3
1c	5 - 8	1.6	NA	Green	T1 - T4	T4
1d	5 - 8	3.0	NA	Green	T1 - T4	T4
1e	.25 - 5	1.3	100%	Square	T3 - T5	T5
1f	.25 - 5	1.6	100%	Square	T3 - T5	T5
1g	.25 - 5	1.2	100%	Square	T3 - T5	T5
1h	Any	0.7	NA	Playground	Any	T5
1i	.125 - 2	0.6	100%	Plaza	T4, T5	T5
1j	Any	3.1	NA	Community Garden	Any	T4

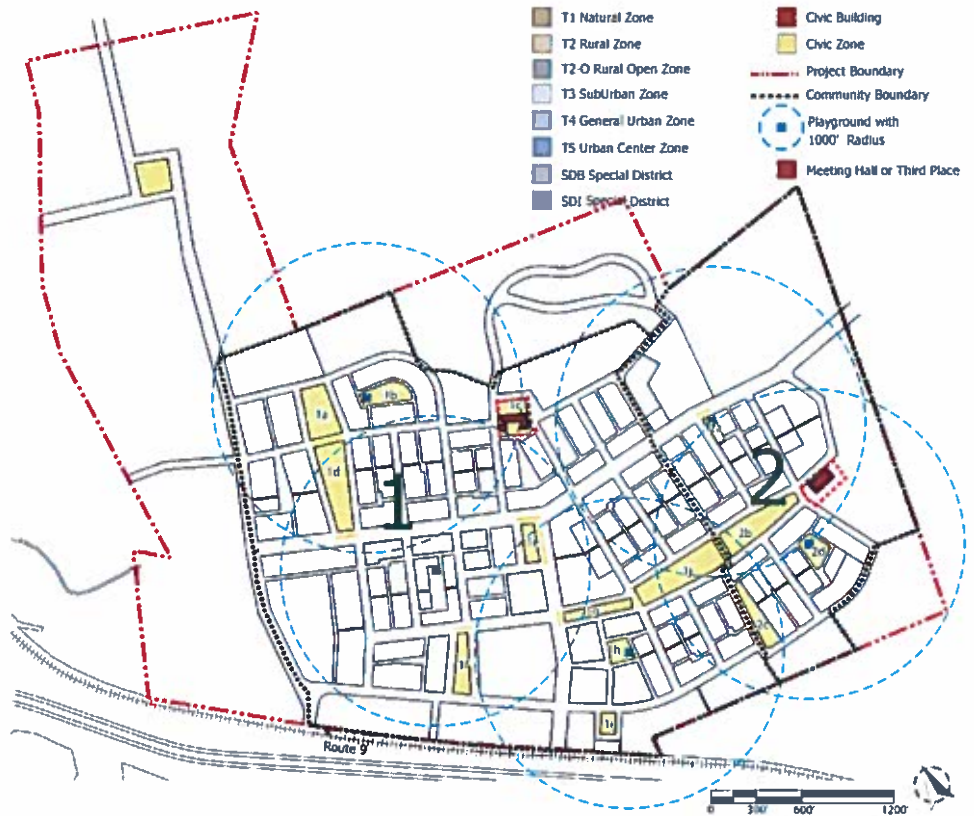
Village 2:

CS	Permitted Area	Area	Perimeter	Type	Permitted T-zone	T-zone
2a	.25 - 5	0.5	50%	Square	T3 - T5	T4
2b	Any	2.5	NA	Community Garden	Any	T4
2c	.25 - 5	1.2	50%	Square	T3 - T5	T4
2d	Any	0.8	NA	Community Garden	Any	T3

3.8.2 Civic Buildings (CB) Specific to T20 - T5 Districts

a. The owner shall covenant to construct a meeting hall or a third place in proximity to the main civic space of each pedestrian shed.

b. Civic building sites shall not occupy more than 20% of the area of each pedestrian shed.



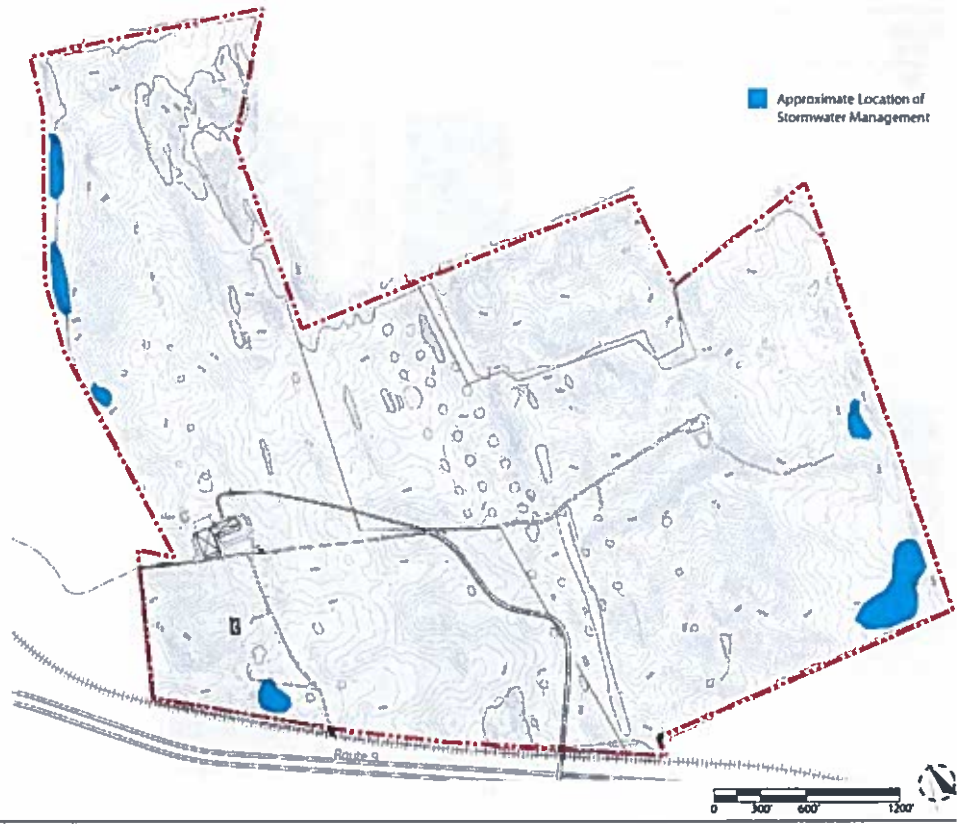
STORMWATER

Stormwater management will utilize a variety of techniques. On-site infiltration will be utilized in T1 through T3, and structured systems are likely in T4 and T5. Light imprint techniques will be utilized when possible.

Total impervious cover for this phase of the development is expected to be under 50% because of the retained agriculture and woodland.

UTILITIES

Water is anticipated to be provided by a public or private utility, and sewer will likely be a new installation, possibly in partnership with the City of Ranson.



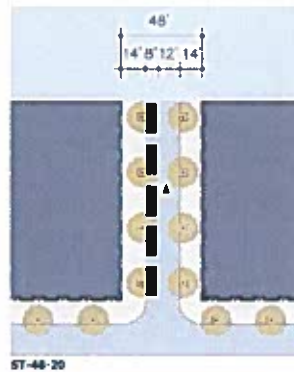
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LAND DEVELOPMENT PLAN & PLAT APPLICATION
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STORMWATER AND UTILITIES
Scale 1" = 60'

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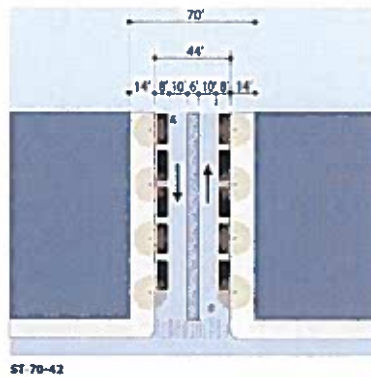
as per Table 26 and 27 for T5

ST-48-20			
Public Frontage Type	Target Speed	Travel Lane Width	Curb Radius
F	25 - 30 MPH	12'	15'



as per Table 26 and 27 for SDI

ST-70-42			
Public Frontage Type	Target Speed	Travel Lane Width	Curb Radius
E	25 - 30 MPH	10'	15'



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 LAND DEVELOPMENT PLAN & PLAT APPLICATION
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PROPOSED THOROUGHFARES
 N.T.S.
 13

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

EXHIBIT C



J E F F E R S O N O R C H A R D S

City of Ranson
Jefferson County, West Virginia
District 8, Tax Map #12, Parcel 1

CHAPTER 19A REZONING REQUEST
MARCH 12, 2012

OWNER / APPLICANT
Jefferson Orchards, Inc.
c/o David Ralston, Manager
PO Box 700
Kearneysville, WV 25430



Existing Conditions

The property is located in District 8 of Jefferson County, West Virginia and is identified on Map 12 as Parcel 1. The total area of the property is approximately 389.7 acres. The boundary information for the property is obtained from exhibit titled Plat of Resurvey prepared by Resource International Ltd. Adjacent parcel and right-of-way locations obtained from Jefferson County Tax Map information. The National Wetlands Inventory Map identifies no potential wetland on the subject property. FEMA Map 540650035C does not identify a 100-year floodplain on the property. No known right-of-ways or easements exist on the property other than easements associated with individual service utilities such as overhead electric.

All technical information and many of the maps in this application were provided by William H. Gordon Associates, Inc.

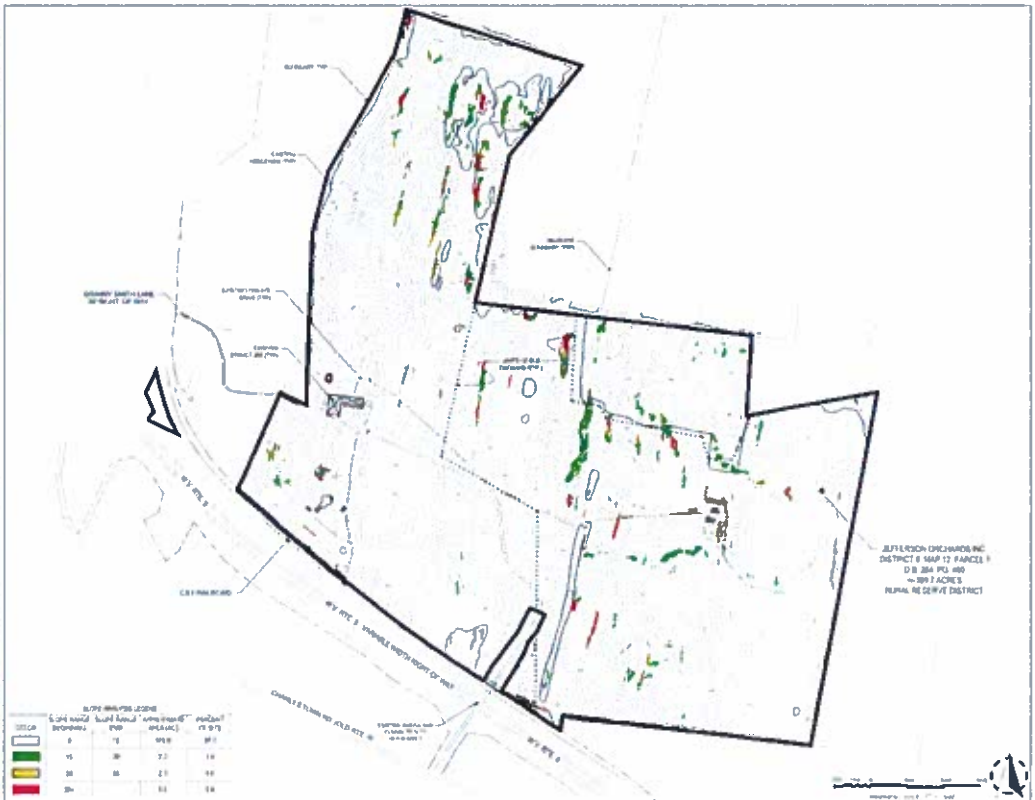
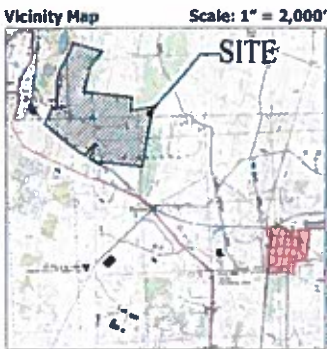
The City of Ranson is co-sponsoring this application because of its use as an illustrative site in shaping Chapter 19A.



JEFFERSON ORCHARDSS RANSON, WEST VIRGINIA
CHAPTER 19A REZONING REQUEST - MARCH 12, 2011
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EXISTING CONDITION:
Aerial

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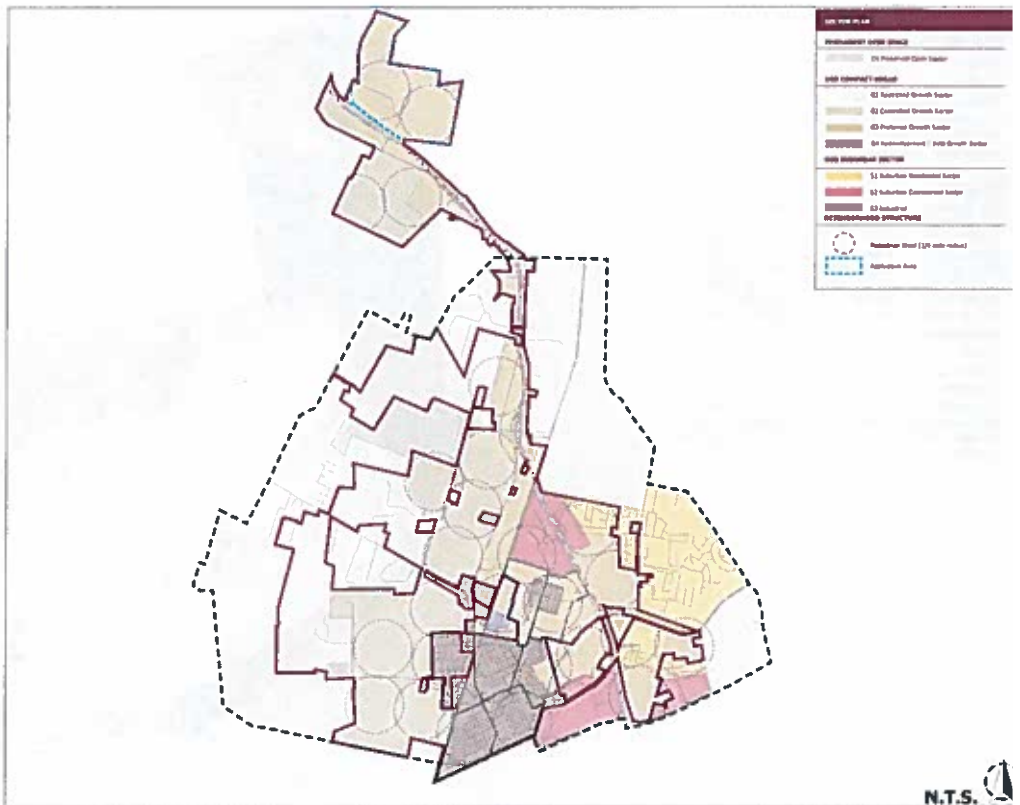
JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
 CHAPTER 19A REZONING REQUEST - MARCH 12, 2011
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EXISTING CONDITIONS
 Topography and Adjacent Land Use

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Sector Plan

The G3 Preferred Growth Sector of the application area is priority expansion area of the 2012 City of Ranson Comprehensive Plan, and encourages the use of Chapter 19A SmartCode. As such this request conforms with the preferred vision of the Comprehensive Plan.



JEFFERSON ORCHARD SS RANSON, WEST VIRGINIA
CHAPTER 19A REZONING REQUEST - MARCH 12, 2011
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COMPREHENSIVE PLAN COMPLIANCE
Sector Plan



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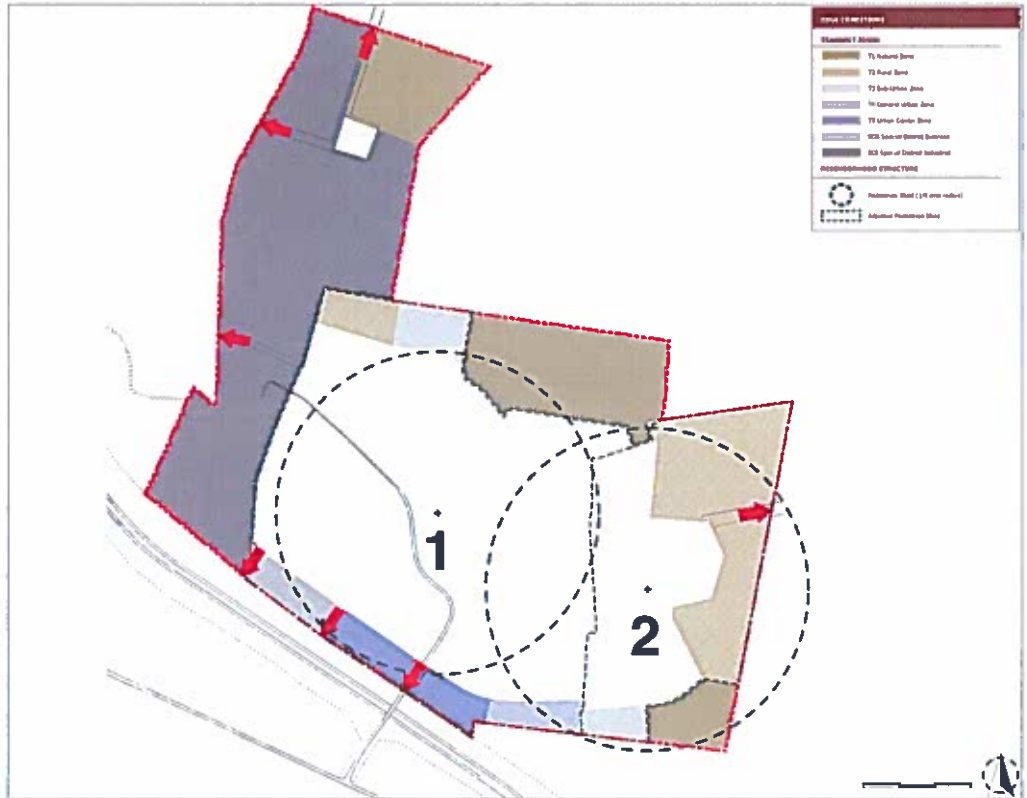
Proposed Community Unit Type:
 Two Villages with Special District Industrial and Special District Business
 Village #1 – High Intensity
 Village #2 – Low Intensity

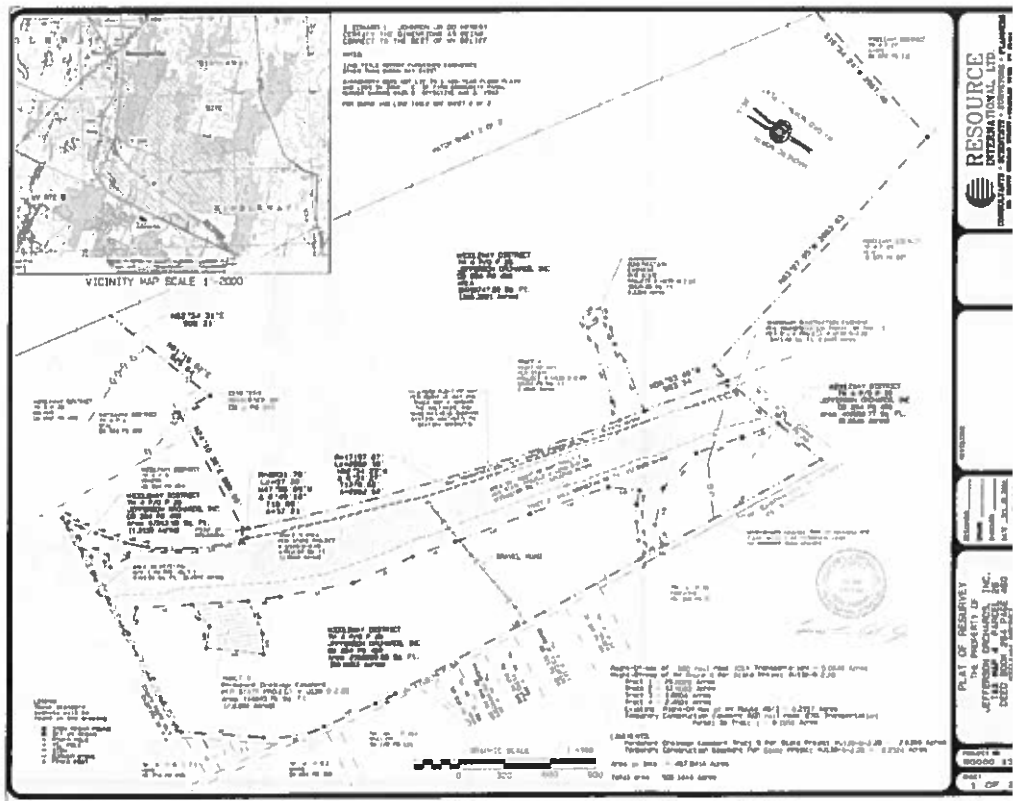
Acres Requirements:
 1.3.4.b Village (VIL): No fewer than 40 acres and no more than 200 acres per VIL.
 Village #1 – 170.8 acres
 Village #2 – 74.9 acres

Edge Transect Zones:
 The proposed T-zones to the north include T1, T2, T3 and SDI. SDI is proposed along the western border with access to the rail line. T1 and T2 are along the eastern edge. And SDI, T5 and T4 are along the Highway 9 to the south. If the Duffields station is relocated, the station would be in the T5 area north of the rail and Highway 9. Connections are proposed to the north, west and east, as well as maintaining or improving all existing connections.

Maximum Densities:
 Village #1 – 3,703 DU
 Village #2 – 628 DU

Perimeter Connectivity:
 The southern connections across Route 9 will be improved and augmented. Additional connections will be made to Co. Route 48/3, to the north, and to the east as adjacent properties permit.

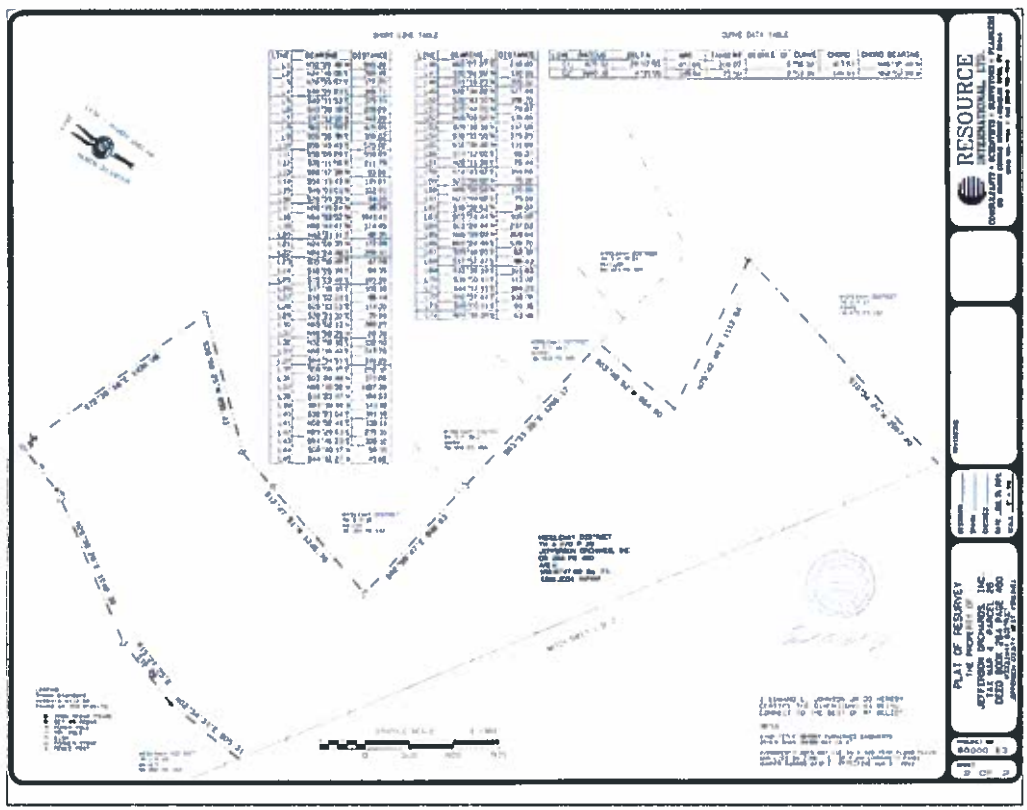




JEFFERSON ORCHARDSS RANSON, WEST VIRGINIA
 CHAPTER 19A REZONING REQUEST - MARCH 12, 2011
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PLA
 Resur

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 CHAPTER 19A REZONING REQUEST - MARCH 12, 2011
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PLAT
 Resurvey

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EXHIBIT D



J E F F E R S O N O R C H A R D S

City of Ranson
Jefferson County, West Virginia
District 8, Tax Map #12, Parcel 1

CHAPTER 19A REZONING REQUEST

JUNE 19, 2017

REVISED JULY 17, 2017

Owner / Applicant
Jefferson Orchards, Inc.
c/o Mark H. Ralston, President
P.O. Box 700
Keameysville, WV 25430

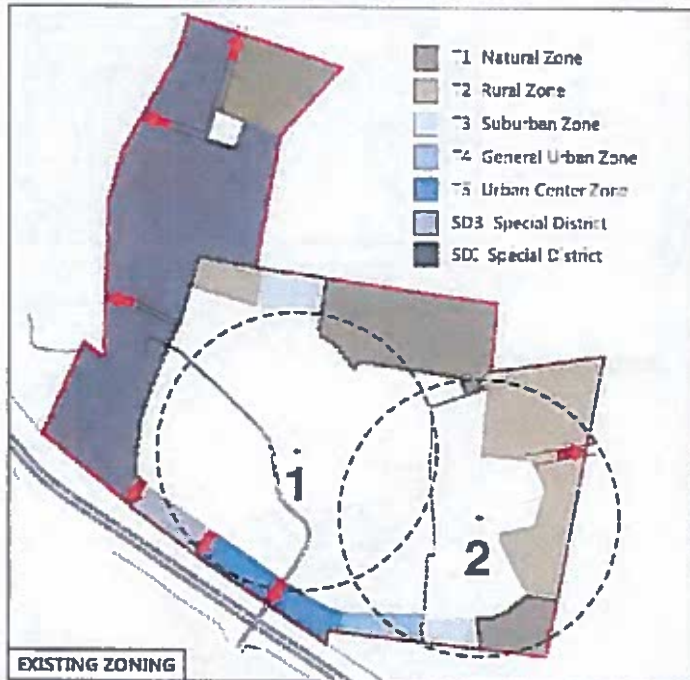


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Ex. Conditions: Topography & Adjacent Land Use	3
Comprehensive Plan Compliance: Sector Plan	4
Edge Conditions: Transect Zones	5
Plan: Resurvey	6
Plan: Resurvey	7

Existing Conditions

The property is located in District 8 of Jefferson County, West Virginia and is identified on Map 12 as Parcel 1. The total area of the property is approximately 389.7 acres. The boundary information for the property is obtained from exhibit titled Plat of Resurvey prepared by Resource International Ltd. Adjacent parcel and right-of-way locations obtained from Jefferson County Tax Map information. The National Wetlands Inventory Map identifies a freshwater pond near the existing dam near Cranby Smith Lane, no other wetlands are identified on the subject property. FEMA Map 54037C0020E, 54037C0040E, 54037C0110E, and 54037C0130E does not identify a 100-year floodplain on the property. No known right-of-ways or easements exist on the property other than easements associated with individual service utilities such as overhead electric.

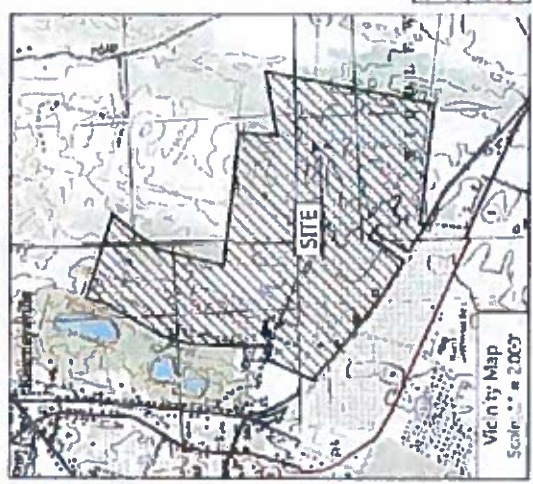


JEFFERSON ORCHARDS RAMSON, WEST VIRGINIA
 CHAPTER 19A REZONING REQUEST - REVISED JULY 17, 2017
COMPILED BY: JEFFERSON COUNTY PLANNING AND ZONING DEPARTMENT

EXISTING CONDITIONS
 Aerial
 2



EXISTING CONDITIONS
Topography and Adjacent Land Use



JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
CHAPTER 13A ZONING REQUEST - REVISED JULY 17, 2017
CREATED BY: J. L. ...

Sector Plan

The G3 Preferred Growth Sector of the application area is a priority expansion area of the 2012 City of Ranson Comprehensive Plan, and encourages the use of Chapter 19A SmartCode. As such this request conforms with the preferred vision of the Comprehensive Plan.

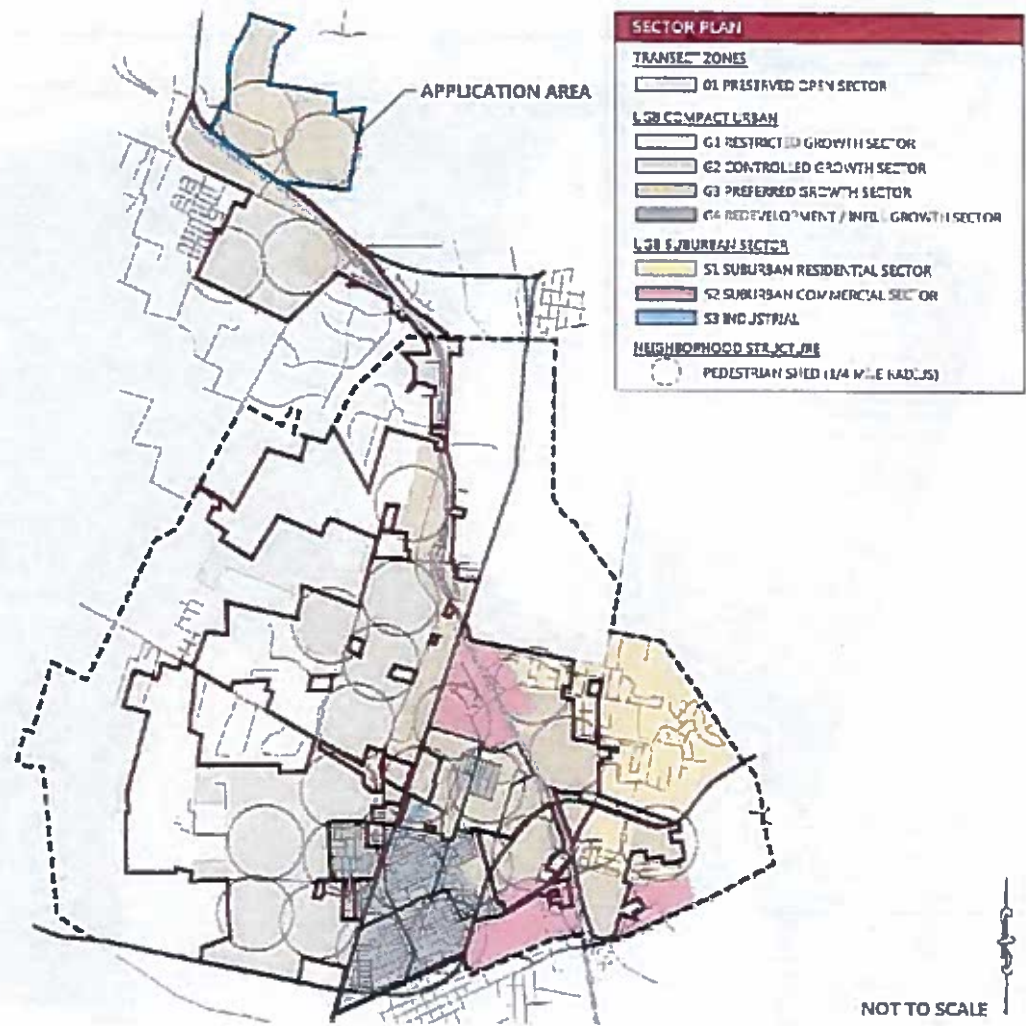
Within the G3 Sector the following acreage requirements are necessary for rezoning:

- a. Hamlet (HAM): 10-50 acres per HAM
- b. Village (VL): No fewer than 40 acres and no more than 200 acres per VL
- c. Town Center (TCT): No fewer than 40 acres and no more than 200 acres per TCT. Multiple Community Units may be included in one rezoning request, provided each Community Unit meets its acreage requirements.
- d. The Comprehensive Plan has five sector designations. Distinct from land use or intensity, these sectors express whether or not a particular area is intended for growth or not and then what type of growth is expected: restricted, controlled, intended, and infill.

This site is currently assigned G-3, which is the most aggressive greenfield development allocation in the City. The City has allocated this sector on both sides of the Route 9 interchange to support private investment in mixed-use and residential development.

The G3 Preferred Growth Sector fulfills the City's Comprehensive Plan Policies for responsible growth, and are the areas in the Urban Growth Boundary where the City intends for the most intense development. These are the areas that the City have also invested resources to expand and improve infrastructure to support this growth.

Information / image obtained from the City of Ranson 2012 Comprehensive Plan.



Proposed Community Type

One Medium Intensity Village and Special District Industrial.

Acreeage Requirements

1.3.5.b Village (VI): No fewer than 40 acres and no more than 200 acres per village.

Proposed Medium Intensity Village: 152.4 acres

3.9.6.b. Industrial Special District (SDI): Limited to a maximum size of 200 acres.

Proposed SDI Area: 158.7 acres

Special Districts

3.9.1. Special district designations shall be assigned to areas that, by their intrinsic size, use, or configuration, cannot conform to the requirements of any Transect District or combination of districts

3.9.3. Special districts may be mapped within or outside of community units. If mapped within a community unit, a special district shall not exceed 20% of the net site area.

Edge Transect Districts

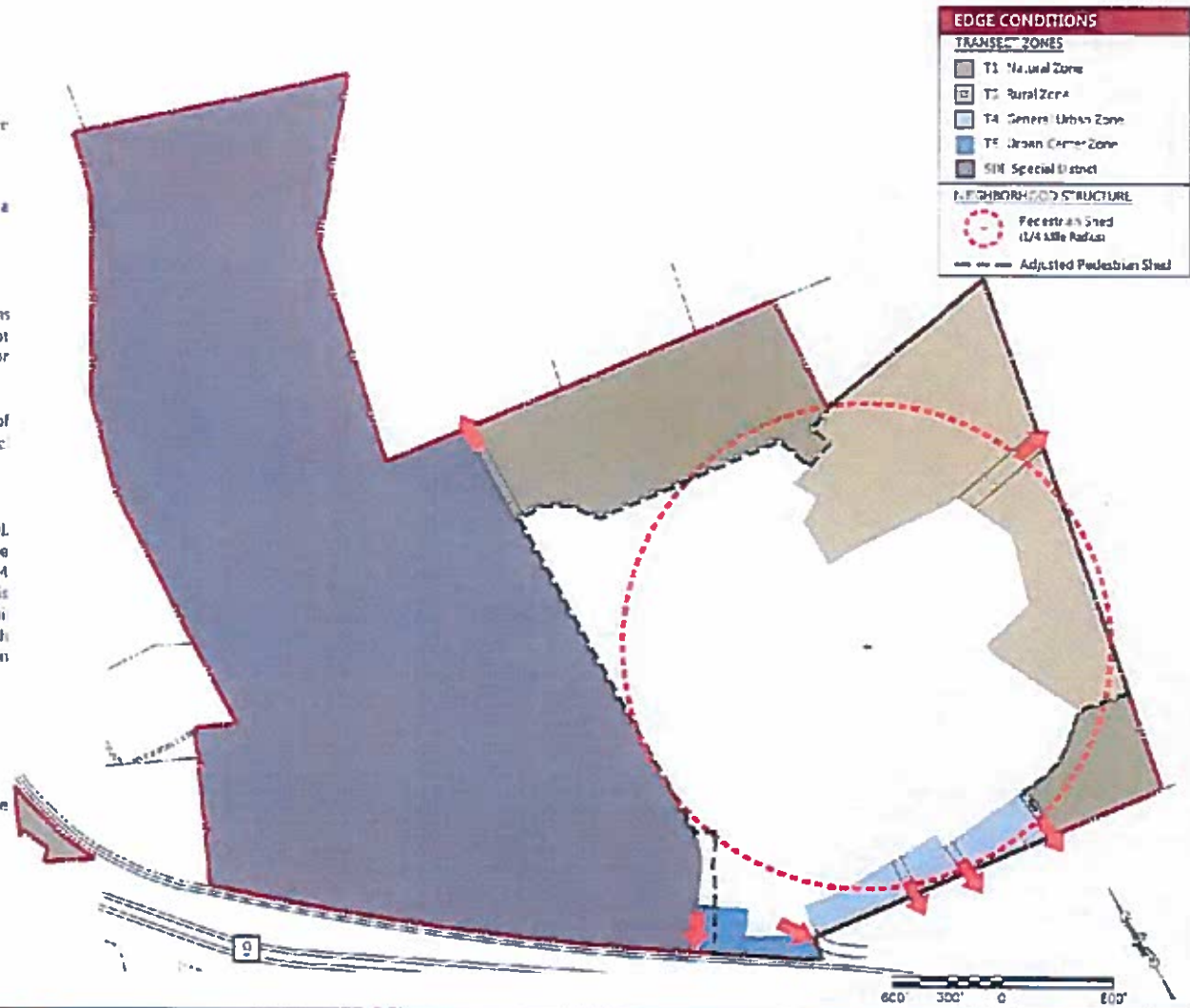
The proposed T-Zones to the north include T1, T2, and SDI. SDI is proposed along the western border with access to the rail line. T1 and T2 are along the eastern edge. SDI, T5 and T4 are along Route 9 to the south. If the Duffields station is relocated, the station would be in the T5 area north of the rail and Route 9. Connections are proposed to the north, south and east, as well as maintaining or improving the connection to Charles Town Road.

Maximum Density:

Village (Medium Intensity) - 2,517 DU

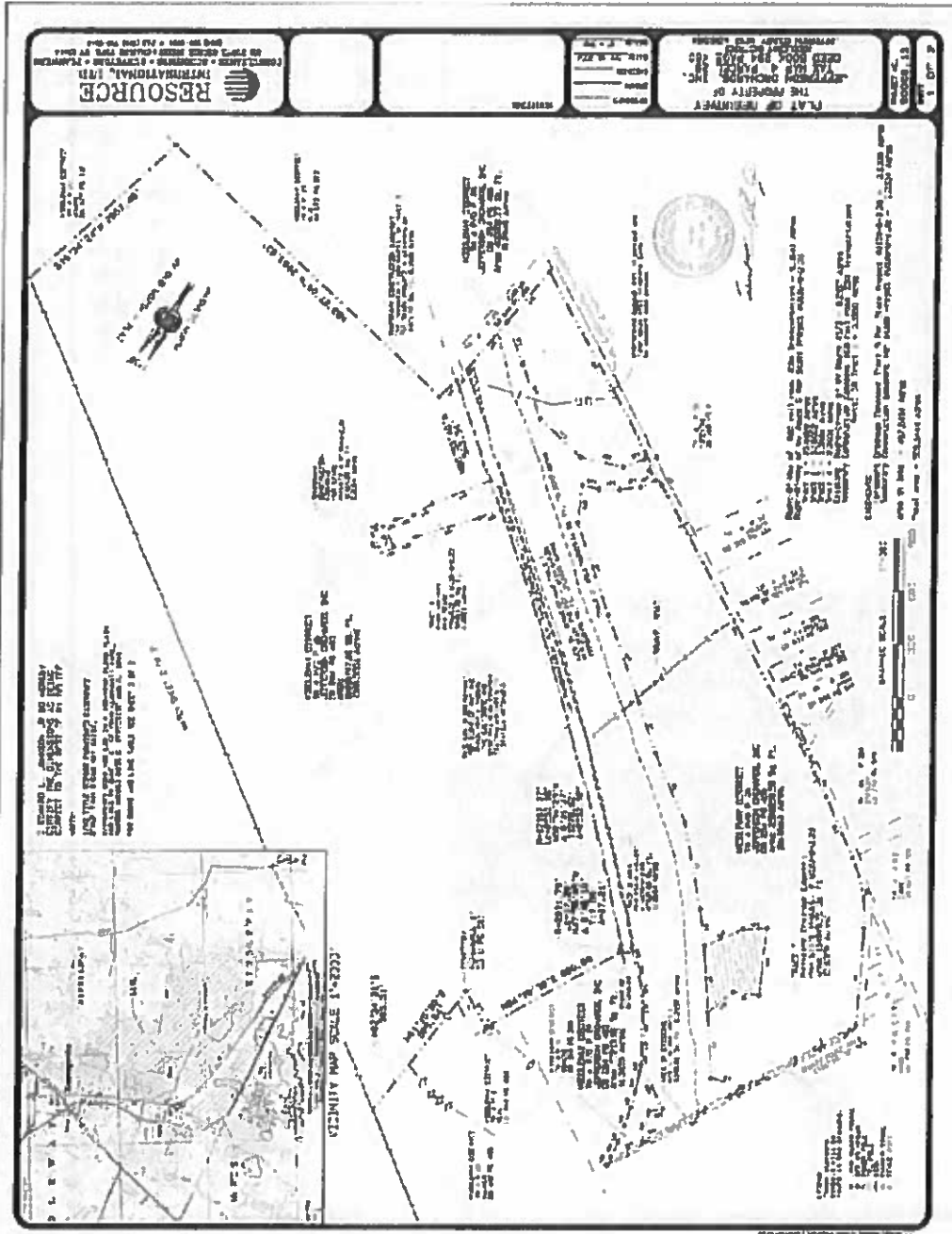
Perimeter Connectivity:

Additional connections will be made to Co. Route 48/5 to the north, and to the east as adjacent properties permit.



JEFFERSON ORCHARDS RAHSCHE, WEST VIRGINIA
 CHAPTER 19A REZONING REQUEST - REVISED JULY 17, 2017
© PREPARED BY WILLIAM H. CARMAN ASSOCIATES, INC., CHARLESTON

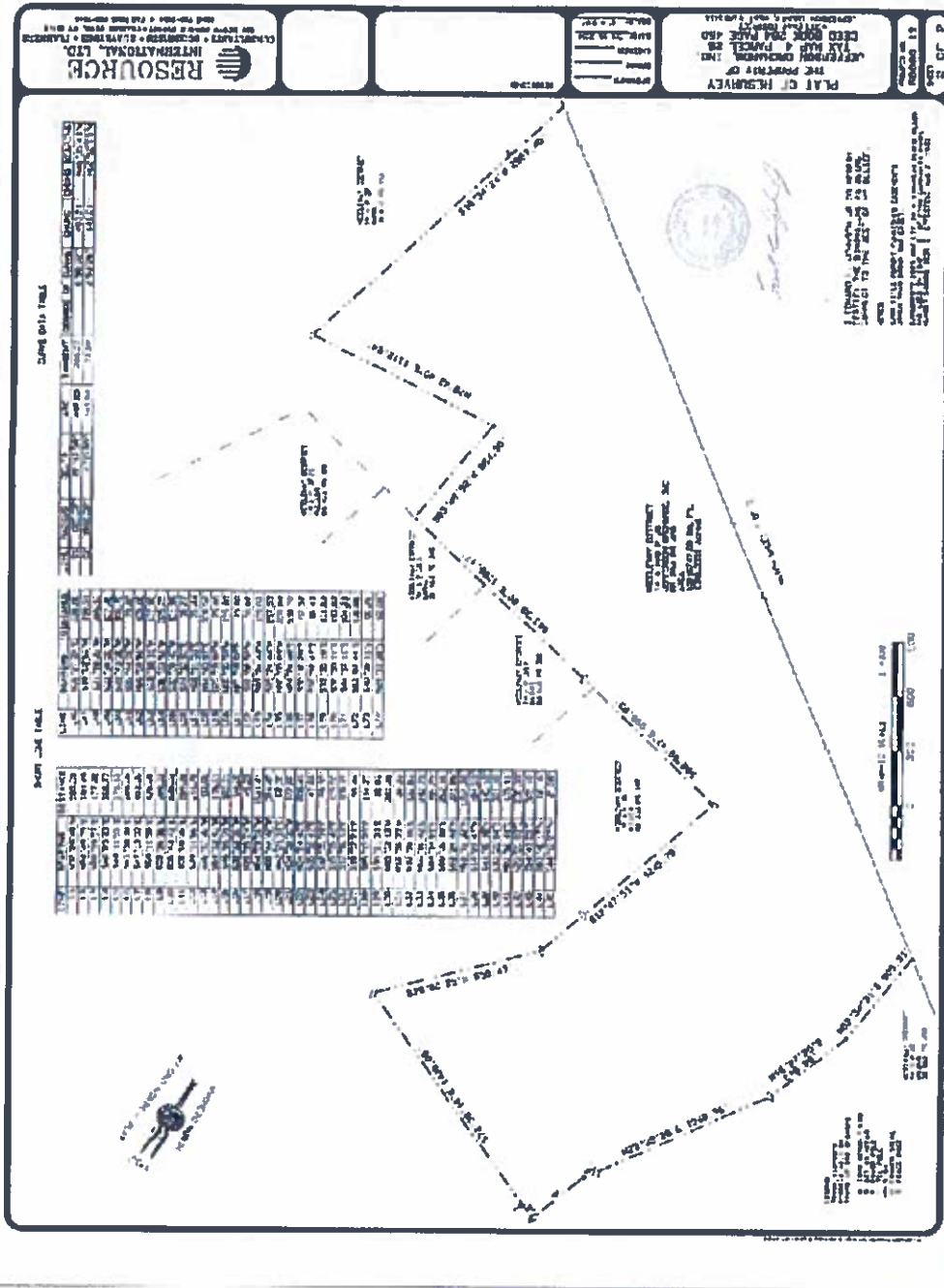
EDGE CONDITIONS
 Transect Zones
 5



Plat
Resurvey

JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
 CHAPTER -9A REZONING REQUEST - REVISED JULY 17, 2017
 COPYRIGHT 2017 BY LAMAR N. JACOBSON ASSOCIATES, P.L.L.C. (LJACOBSON)

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)



JEFFERSON ORCHARDS RANSON, WEST VIRGINIA
 CHAPTER 59A REZONING REQUEST - REVISED JULY 17, 2017
 SUBMITTED BY: JEFFREY ORCHARD, INC. (16885)

Plat
 Resurvey

EXHIBIT E



Planning Commission
312 South Mildred Street
Ranson WV, 25438
REQUEST FOR COMMISSION ACTION www.cityofransonwv.net

TO: Planning Commission

FROM: Reiley Knight,

SUBJECT: Jefferson Orchards Rezoning

On March 26, 2012, Jefferson Orchards had been rezoned from the original zoning classification of Rural Reserve to Smart Code-New Community. Within the Smart Code- New Community rezone, there are two villages, Village #1 is High Intensity at 170.8 acres while Village #2 is Low Intensity at 74.9 acres. Within these Villages, transect zones would be in place, in the North they would include T1, T2, T3 and SDI. SDI was proposed along the western border due to the rail line access point. T1 and T2 are along the eastern edge and SDB, T5 and T4 are along Highway 9 to the south.

Now in 2017, Jefferson Orchards is bringing forth another rezoning application, this application would take what was approved in 2012 and make changes necessary for future development. In this rezoning application within the proposed community type is one medium intensity village and special district industrial. Acreage would be village: No fewer than 40 acres and no more than 200 acres per village, the proposed medium intensity village is 152.4 acres, Industrial Special District is proposed at 198.7 acres. Special district designations shall be assigned to areas that, by their intrinsic size, use, or configuration, cannot conform to the requirements of any Transect District of combination of districts, special districts may be mapped within or outside of community units. If mapped within a community unit, a special district shall not exceed 20% of the net site area. The transect zones would remain the same as the previous application from 2012.

Staff has reviewed the application for sufficiency and has found the application to be substantially compliant by Chapter 19A Article 1 Section 1.3 Rezoning. The application is consistent with the 2012 City of Ranson Comprehensive Plan and adopted community vision. Staff supports a recommendation to adopt the rezoning

of Jefferson Orchards.

Attachments:

1. 2017-07-17_JO_RZ

1. Review report.
2. Make inquiries; offer input to Staff.
3. Motion to: **Approve the Re-zoning Application and direct Staff to record the Rezoning Application and Resolution with the County Clerk.**
4. Vote.
5. If approved, President signs the Resolution.

EXHIBIT F

PC Resolution # 17-10

CORPORATION OF RANSON
 MARIA DULA
 317 SOUTH HILDRED STREET
 RANSON WV 25438-1421

RESOLUTION

A RESOLUTION OF THE CITY OF RANSON PLANNING COMMISSION RECOMMENDING A ZONING AMENDMENT TO REZONE THE AREA KNOWN AS JEFFERSON ORCHARDS. REALLOCATING TRASECT DISTRICTS AT THE "JEFFERSON ORCHARDS" (DISTRICT 8, TAX MAP 12, PARCEL 1, CONSISTING OF 387.7 ACRES).

A RESOLUTION recommending the amendment of certain portions of the official Zoning Map of the City of Ranson, West Virginia, for the purpose of reallocating the transect districts of the Smart-Code New Community in place.

WHEREAS, West Virginia Code § 8A-7-9 permits the governing body to amend the zoning ordinance by petition of the Planning Commission or the owners of fifty percent or more of the real property in the area to which the petition relates; and

WHEREAS, Jefferson Orchards Inc. and Gordon Engineering submitted a rezoning petition for Jefferson Orchards; and

WHEREAS, W. Va. Code § 8A-5-8(d) states, "[a]t a meeting at the conclusion of the public hearing or a meeting held within fourteen days after the public hearing, the planning commission shall vote to approve, deny or hold the application;" and

WHEREAS, the Planning Commission has deemed the application complete and set a public hearing for August 7, 2017, at 7:00 p.m.; said hearing being notice as a Class I Legal Advertisement in the Spirit of Jefferson, as well as on the notice boards at City Hall and the City's website.

NOW, THEREFORE, BE IT RESOLVED BY THE RANSON PLANNING COMMISSION THAT:

1. The Ranson Planning Commission finds that the zoning map amendment is consistent with the adopted comprehensive plan as revised and has been properly noticed.
2. Consistent with Chapter 19A, Section 1.3.7, upon approval of the Land Development Plan and Plat by the Planning Commission pursuant to Chapter 19A, 3.1.4, specific transect districts shall replace the SC-NC designation on the official zoning map as part of the Planning Commission's approval of the land development plan and plat, so long as the allocation of the zoning districts with the land development plan and plat

are consistent with Table 3 of Chapter 19A and the official zoning map shall not be considered a zoning amendment pursuant to W. Va. Coc 8A-7-8; thus, the placement of transect zones will not require further action of the Planning Commission or City Council. Transect zone placement shall be considered a continuation of the original SC-NC rezoning process pursuant to this Ordinance. So, long as the applicant complies with Table 3 of Chapter 19A, the transect districts may be relocated within the parcel(s) administratively and on the official zoning map until final plat approval. Once the final plat is approved pursuant to Chapter 19A, 5.1.8.g, transect districts may not be relocated or rearranged and may only be amended through the City's rezoning process.

- 3. The Ranson Planning Commission hereby finds that the zoning amendment is consistent with the purposes of zoning and consistent with the City of Ranson's Comprehensive Plan because the G3 Preferred Growth Sector of the application area is a priority expansion area of the 2012 City of Ranson Comprehensive Plan. And encourages the use of Chapter 19A Smartcode.
- 4. A copy of this Resolution shall be forwarded to the Ranson City Council immediately upon its adoption.

Adopted this 7th day of August, 2017.

By: Anthony E. Grant
Planning Commission President

ATTEST:
Walt B. L.
Planning Commission Member

Jefferson County
Jennette C. Shadle, Clerk
Instrument: 20170615307
09/06/2017 @ 01:51:05 PM
RESOLUTION
Book 1195 @ Page 615
Pages Recorded 18
Recording Post 5

AFFIX CITY SEAL



Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

EXHIBIT G

ORDINANCE # 2017-302**AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: "JEFFERSON ORCHARDS" REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)**

AN ORDINANCE to amend certain portions of the official Zoning Map of the City of Ranson, West Virginia, for the purpose of reallocating transect districts within Smart Code New Community District (SC-NC) pursuant to Chapter 19-20 of the Ranson Municipal Code and Chapter 19A, Article 1 of the Ranson Municipal Code;

WHEREAS, West Virginia Code § 8A-7-8 and § 8A-7-9 permits the amendments to the zoning ordinance by either the governing body or petition by owners of fifty percent or more of the real property in the area in which the petition relates;

WHEREAS, Jefferson Orchards Inc. has submitted a rezoning petition and application;

WHEREAS, Jefferson Orchards, Inc., is the sole owner of the attached illustrated property, more commonly known as Jefferson Orchards, and being the same property, as described below, has petitioned the City of Ranson Planning

Commission for a zoning map amendment to change the allocation of the transect districts within Smart Code New Community District (SC-NC);

WHEREAS, the Ranson Planning Commission adopted a Resolution dated August 7, 2017, recommending the Ranson City Council to amend the zoning map and change the subject property's zoning from as specifically illustrated on the attached Zoning Application;

WHEREAS, pursuant West Virginia Code § 8A-7-9, proper public notice and public hearings have been provided; and

WHEREAS, the rezoning petition is consistent with the 2012 Ranson Comprehensive Plan. The G3 Preferred Growth Sector of the application area is a priority expansion area of the 2012 City of Ranson Comprehensive Plan, and encourages the use of Chapter 19A Smart Code. As such, this rezoning petition conforms to the preferred vision of the Comprehensive Plan.

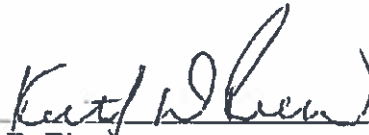
NOW, THEREFORE, be it enacted and ordained by the Council of the City of Ranson, West Virginia:

Section 1. The official City of Ranson Zoning Map be amended to reflect that Jefferson Orchards, located in District 8 of Ranson, Jefferson County, and identified

on Map 12 as Parcel 1 consisting of approximately 389.7 acres is Smart Code-New Community (SC-NC) with new allocated transect districts.

Section 2. Consistent with Chapter 19A, Section 1.3.7, upon approval of the Land Development Plan and Plat by the Planning Commission pursuant to 3.1.4, specific transect districts shall replace the SC-NC designation on the official zoning map as part of the Planning Commission's approval of the land development plan and plat, so long as the allocation of the zoning districts within the land development plan and plat are consistent with Table 3 of Chapter 19A and the original rezoning to SC-NC. The replacement of specific transect zones on the official zoning map shall not be considered a zoning amendment pursuant to West Virginia § 8A-7-8 or West Virginia § 8A-7-9; thus, the placement of transect zones will not require further action of the Planning Commission or City Council. Transect zone placement shall be considered a continuation of the original SC-NC rezoning process pursuant to this Ordinance. So may be relocated within the parcel(s) administratively and on the official zoning map until final plat approval. Once the final plat is approved pursuant to Chapter 19A, 5.1.6.g transect districts may not be relocated or rearranged and may only be amended through the City's rezoning process.

Adopted by the City Council of the City of Ranson after a 1st reading on August 15, 2017 and second reading on September 5, 2017 by 6 in the affirmative, 0 in the negative with 0 abstentions.



Keith D. Pierson
Mayor

ATTEST:



Stacy A. Dodson Pfaltzgraff
City Clerk



Proposed Ordinance #2017-302

I am writing to ask you to reject Proposed Ordinance #2017-302 to reallocate Transect Districts at Jefferson Orchards and please do not amend the zoning map that was created in 2012 following the guidelines of the Ranson Comprehensive plan. Accepting the invalid recommendation of the Planning Commission does not create a favorable outcome of the re-enactment of #2017-302. W. Va. §8A-7-2. Contents of zoning ordinance. States the following must be considered for zoning:

- (1) Promoting general public welfare, health, safety, comfort and morals;
- (2) A plan so that adequate light, air, convenience of access and safety from fire, flood and other danger is secured;
- (3) Ensuring attractiveness and convenience is promoted;
- (4) Lessening congestion;
- (5) Preserving historic landmarks, sites, districts and buildings;
- (6) Preserving agricultural land; and
- (7) Promoting the orderly development of land.

I cannot read any of those seven statements and agree that the amendment before you is in compliance. What I can assure you, is that the community is already suffering from the effects of your previous decisions to allow a heavy industrial manufacturing facility to be constructed on Jefferson Orchards. There should be no doubt that is exactly what is being constructed. From both Rockwool and those who signed the MOU and PILOT agreement, the Project is referred to as the company's desire to build a Heavy Industrial Manufacturing facility. This use does not conform to Chapter 19A, Article 5.7.1 table 7 nor 8. The Industry to come, if the rezoning is enacted, requires a Conditional Use variance, because it was never meant to be. Light manufacturing is acceptable, what we all had agreed was appropriate under the Smart Code which promotes living, working and walkable communities – a place where one can have a life – work balance. The whole community poured passion, time and grant funds into designing the 2012 goals. No one was up in arms, because those decisions at the time, remained in harmony with the surrounding Jefferson County lands and heritage and did not jeopardize the community's health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources, exactly what the Comprehensive plan is to promote, under W. Va. §8A-3-1.

If you reference Chapter 19A, Article 5.7.1 Building and Land Use

Conditional use shall be granted if the following conditions are met:

- a. The use will not materially endanger the public health or safety or constitute a public nuisance if located where proposed and developed according to the plans and information submitted and approved.
- b. The use will not substantially injure the value of adjoining property; or that the use is a public necessity.

- c. The location and character, if developed according to the plans and information approved, will be in harmony with the proximate land uses, and consistent with the purposes of the district.
- d. The use complies with any specific requirements as set forth in the municipal ordinances to obtain a special exception.

Again, while I am not responsible to make the determination set forth, it is incomprehensible how #2017-302 follows these conditions. The reallocation to expand the industrial zone, inherently increases pollution, can deteriorate air, land and water quality, all diminishing the quality of life for residents. Adjacent property owners to Jefferson Orchards say NO, community members say NO and the Ranson City Council should likewise vote, NO. You may view this reenactment as correcting a procedural error. Look at this as a real opportunity to set the record straight and reject the rezoning. Restore the peace in the community and restore the true meaning of the Ranson Renewed vision. Thank You for your consideration.

Sincerely,
Anastasya Tabb
Shepherdstown, WV

Article

Subdivision & Zoning

TABLE 7. BUILDING INTENSITY

	RESTRICTED	LIMITED	OPEN
a. RESIDENTIAL	The number of dwellings on each lot is restricted to one within a principal building and one within an accessory building. Both dwellings shall be under single ownership. The habitable area of the accessory unit shall not exceed 500 sq. ft. excluding the parking area. Residential uses may occupy any building story.	Residential uses may occupy any building story.	Residential uses may occupy any building story.
	T2 T3	T20 T4	T5L T5
b. LODGING	The number of bedrooms available on each lot for lodging is limited to five. The lodging must be owner occupied. Food service may be provided in the morning. The maximum length of stay shall not exceed ten days. Lodging may occupy any building story.	The number of bedrooms available on each lot for lodging is limited to twelve. The lodging must be owner occupied. Food service may be provided in the morning. The maximum length of stay shall not exceed fourteen days. Lodging may occupy any building story.	The number of bedrooms available on each Lot for lodging is not limited. Food service may be provided at all times. The area allocated for food service shall be calculated and provided with parking according to retail use. Lodging may occupy any building story.
	T2 T20 T3	T4 T5L	T5
c. OFFICE	The building area available for office use on each lot is restricted to 600 square feet within the first story of the principal or the accessory building or within basements.	The building area available for office use on each lot is limited to the first story of the principal building and/or to the accessory building.	Office uses may occupy any building story.
	T2 T3	T20 T4	T5 SDB SDI
d. RETAIL	The building area available for retail use is restricted to the first story of buildings at corner locations and may not exceed 1,500 square feet. Food service is limited to no more than 600 square feet of seating area.	The building area available for retail use is limited to the first story of buildings at corner locations. Food service is limited to no more than 1,800 square feet of seating area.	Retail uses may occupy any building story. Retail spaces under 1,500 square feet are exempt from parking requirements.
	T2 T3	T4 T5L	T20 T40 T5 SDB
e. INSTITUTIONAL		The building area available for institutional use on each lot is limited to the first story of the principal building.	Institutional uses may occupy any building story
			T5 SDB SDI
f. MANUFACTURING		By special exception	Limited to specific uses in Table B
			SDB SDI
g. INDUSTRIAL		By special exception	Limited to specific uses in Table B
			SDB SDI
h. AGRICULTURAL	By right	Limited to specific uses in Table B	
		T2	T20

The intensities of the base Transect districts are as follows: T2 – Restricted; T3 – Restricted; T4 – Limited; T5 – Open. Modifiers of L or O are used when the sub-district has a different intensity from the base district.

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Article 5

Subdivision & Zoning

TABLE 8. BUILDING USE

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	T2	T2	T3	T4	T4	T5	T5	SD	SD
Intensity	R	R	L	L	O	O	B	B	I
a. RESIDENTIAL									
Mixed use building									
Multifamily dwelling									
Live-work unit									
Duplex									
Townhouse									
Single family residential									
Senior housing									
Accessory Unit									
b. LODGING									
Hotel (no room limit)									
Inn (up to 12 rooms)									
Bed & Breakfast (up to 8 rooms)									
School Dormitory									
c. OFFICE									
Office building									
Mixed use building									
Live-work unit									
d. RETAIL									
Open-Market Building									
Mixed use building									
Retail Building									
Display Gallery									
Restaurant									
Kiosk									
Push Cart									
Video Lottery ¹									
Adult Entertainment ²									
e. INSTITUTIONAL									
Convention Center									
Conference Center									
Exhibition Center									
Live Theater									
Movie Theater									
Museum									
Outdoor Auditorium									
Sports Stadium									
Religious Assembly									
f. AGRICULTURE									
Grain Storage									
Livestock Pen									
Garden Supply									
Greenhouse									
Stable									
kennel									
Family Farm									
Employment Farm									
Rear Yard Garden									
Honey Bees									
Livestock									
Poultry									

	T2	T2	T3	T4	T4	T5	T5	SD	SD
Intensity	R	R	L	L	O	O	B	B	I
g. AUTOMOTIVE									
Gasoline									
Automobile Service									
Automobile Sales									
Truck Maintenance									
Drive-Through Facility									
h. CIVIL SUPPORT									
Cemetery									
Funeral Home									
Hospital									
Medical Clinic									
Animal Hospital									
i. EDUCATION									
College									
High School									
Trade School									
Elementary School									
Childcare Center									
j. INDUSTRIAL									
Heavy Industrial Facility									
Light Industrial Facility									
Truck Depot									
Laboratory Facility									
Warehouse									
Produce Storage									
Mini-Storage									
Heavy Manufacturing									
Light Manufacturing									

Permitted ■
Conditional Use Pursuant to 57.1 □

¹ Video lotteries may be permitted by Conditional Use as an accessory use to a restaurant or hotel in T-40 or T5 upon the conditions stated in Chapter 19-8(c) (3).

² Adult uses only permitted under certain conditions in HC and RC pursuant to Ranson Municipal Code 14-70 and 19-7.

Plan Comm 9/12/16 – Ordinance 2016-282 added Ho

	T2	T2	T3	T4	T4	T5	T5	SD	SD
Intensity	R	R	L	L	O	O	B	B	I
f. AGRICULTURE									
Orchard									
Livestock Pen									
Garden Supply									
Greenhouse									
Stable									
kennel									
Family Farm									
Employment Farm									
Rear Yard Garden									
Honey Bees									
Livestock									
Poultry									

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Article 5

Subdivision & Zoning

TABLE 8. BUILDING USE

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	T2	T2	T3	T4	T4	T5	T5	SD	SD
Intensity	R	O	R	L	O	L	O	B	I
a. RESIDENTIAL									
Mixed use building					■	■	■	■	
Multifamily dwelling					■	■	■	■	
Live-work unit	■	■	■	■	■	■	■	■	
Duplex	■				■	■	■	■	
Townhouse	■				■	■	■	■	
Single family residential	■	■	■	■	■	■	■	■	
Senior housing	■	■	■	■	■	■	■	■	
Accessory Unit	■	■	■	■	■	■	■	■	
b. LODGING									
Hotel (no room limit)					■	■	■	■	■
Inn (up to 12 rooms)	■	■	■	■	■	■	■	■	■
Bed & Breakfast (up to 6 rooms)	■	■	■	■	■	■	■	■	■
School Dormitory				■	■	■	■	■	■
c. OFFICE									
Office building					■	■	■	■	■
Mixed use building					■	■	■	■	■
Live-work unit	■	■	■	■	■	■	■	■	■
d. RETAIL									
Open-Market Building	■	■	■	■	■	■	■	■	■
Mixed use building					■	■	■	■	■
Retail Building	■	■	■	■	■	■	■	■	■
Display Gallery					■	■	■	■	■
Restaurant	■	■	■	■	■	■	■	■	■
Kiosk					■	■	■	■	■
Push Cart	■	■	■	■	■	■	■	■	■
Video Lottery ¹					■	■	■	■	■
Adult Entertainment ²					■	■	■	■	■
e. INSTITUTIONAL									
Convention Center						■	■	■	■
Conference Center					■	■	■	■	■
Exhibition Center					■	■	■	■	■
Live Theater					■	■	■	■	■
Movie Theater					■	■	■	■	■
Museum					■	■	■	■	■
Outdoor Auditorium		■	■	■	■	■	■	■	■
Sports Stadium					■	■	■	■	■
Religious Assembly	■	■	■	■	■	■	■	■	■
f. AGRICULTURE									
Grain Storage	■	■	■					■	■
Livestock Pen	■	■	■					■	■
Garden Supply	■	■	■	■	■	■	■	■	■
Greenhouse	■	■	■	■	■	■	■	■	■
Stable	■	■	■	■	■	■	■	■	■
Kennel	■	■	■	■	■	■	■	■	■
Family Farm	■	■	■	■	■	■	■	■	■
Employment Farm	■	■	■	■	■	■	■	■	■
Rear Yard Garden	■	■	■	■	■	■	■	■	■

Poultry ■ ■ ■ ■ ■ ■ ■ ■ ■ ■

	T2	T2	T3	T4	T4	T5	T5	SD	SD
Intensity	R	O	R	L	O	L	O	B	I
g. AUTOMOTIVE									
Gasoline		■				■	■	■	■
Automobile Service						■	■	■	■
Automobile Sales						■	■	■	■
Truck Maintenance	■							■	■
Drive-Through Facility						■	■	■	■
h. CIVIL SUPPORT									
Cemetery	■	■	■	■	■	■	■	■	■
Funeral Home						■	■	■	■
Hospital						■	■	■	■
Medical Clinic						■	■	■	■
Animal Hospital	■					■	■	■	■
i. EDUCATION									
College	■	■	■	■	■	■	■	■	■
High School	■	■	■	■	■	■	■	■	■
Trade School						■	■	■	■
Elementary School	■	■	■	■	■	■	■	■	■
Childcare Center	■	■	■	■	■	■	■	■	■
j. INDUSTRIAL									
Heavy Industrial Facility								■	■
Light Industrial Facility	■	■	■	■	■	■	■	■	■
Truck Depot								■	■
Laboratory Facility	■	■	■	■	■	■	■	■	■
Warehouse	■	■	■	■	■	■	■	■	■
Produce Storage	■	■	■	■	■	■	■	■	■
Mini-Storage								■	■
Heavy Manufacturing								■	■
Light Manufacturing	■	■	■	■	■	■	■	■	■

Permitted ■
 Conditional Use □
 Pursuant to 5.7.1 □

¹ Video lotteries may be permitted by Conditional Use as an accessory use to a restaurant or hotel in T-40 or T5 upon the conditions stated in Chapter 19-8(c) (3).
² Adult uses only permitted under certain conditions in HC and RC pursuant to Ranson Municipal Code 14-70 and 19-7

Plan Comm 9/12/16 – Ordinance 2016-282 added Honey Bees

	T2	T2	T3	T4	T4	T5	T5	SD	SD
Intensity	R	O	R	L	O	L	O	B	I
k. AGRICULTURE									
Grain Storage	■	■	■					■	■
Livestock Pen	■	■	■					■	■
Garden Supply	■	■	■	■	■	■	■	■	■
Greenhouse	■	■	■	■	■	■	■	■	■
Stable	■	■	■	■	■	■	■	■	■
Kennel	■	■	■	■	■	■	■	■	■
Family Farm	■	■	■	■	■	■	■	■	■
Employment Farm	■	■	■	■	■	■	■	■	■
Rear Yard Garden	■	■	■	■	■	■	■	■	■

Article 5

Subdivision & Zoning

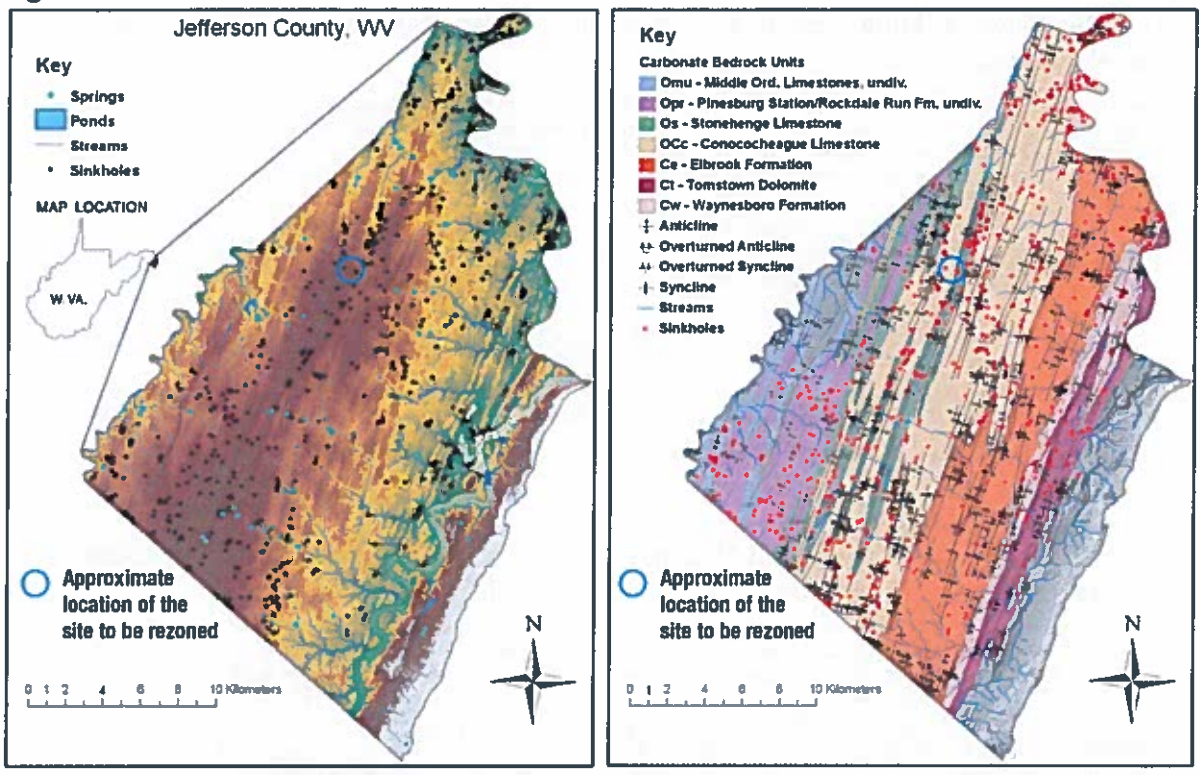
TABLE 7. BUILDING INTENSITY

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			T5L T5
b. LODGING	The number of bedrooms available on each lot for lodging is limited to five. The lodging must be owner occupied. Food service may be provided in the morning. The maximum length of stay shall not exceed ten days. Lodging may occupy any building story.	The number of bedrooms available on each lot for lodging is limited to twelve. The lodging must be owner occupied. Food service may be provided in the morning. The maximum length of stay shall not exceed fourteen days. Lodging may occupy any building story.	T4 T5L T5
			T4 T5L
			T4 T5L
			T4 T5L
c. OFFICE	The building area available for office use on each lot is restricted to 600 square feet within the first story of the principal or the accessory building or within basements.	The building area available for office use on each lot is limited to the first story of the principal building and/or to the accessory building.	T20 T4 T5 SDB SDI
			T20 T4
			T20 T4
d. RETAIL	The building area available for retail use is restricted to the first story of buildings at corner locations and may not exceed 1,500 square feet. Food service is limited to no more than 600 square feet of seating area.	The building area available for retail use is limited to the first story of buildings at corner locations. Food service is limited to no more than 1,600 square feet of seating area.	T4 T5L T5 SDB T20 T40 T5 SDB
			T4 T5L
			T4 T5L
			T4 T5L
e. INSTITUTIONAL		The building area available for institutional use on each lot is limited to the first story of the principal building.	T5L T5 SDB SDI
f. MANUFACTURING		By special exception	Limited to specific uses in Table 8 SDB SDI
g. INDUSTRIAL		By special exception	Limited to specific uses in Table 8 SDB SDI
h. AGRICULTURAL	By right	Limited to specific uses in Table 8	T2 T20

The intensities of the base Transect districts are as follows: T2 – Restricted; T3 – Restricted; T4 – Limited; T5 – Open. Modifiers of L or O are used when the sub-district has a different intensity from the base district.

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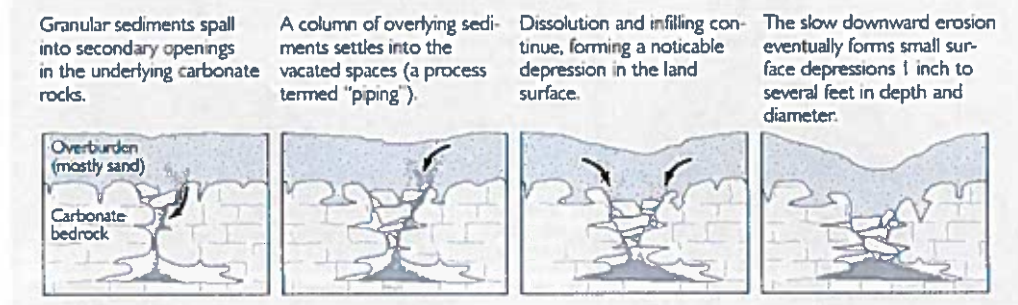
Figure 1:



Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Figure 2:

Cover-subsidence sinkholes tend to develop gradually where the covering sediments are permeable and contain sand.



In areas where cover material is thicker or sediments contain more clay, cover-subsidence sinkholes are relatively uncommon, are smaller, and may go undetected for long periods.

Cover-collapse sinkholes

may develop abruptly (over a period of hours) and cause catastrophic damages. They occur where the covering sediments contain a significant amount of clay.

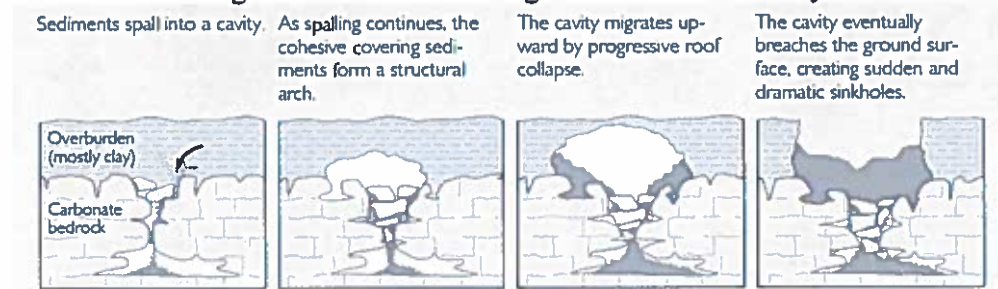


Figure 3:

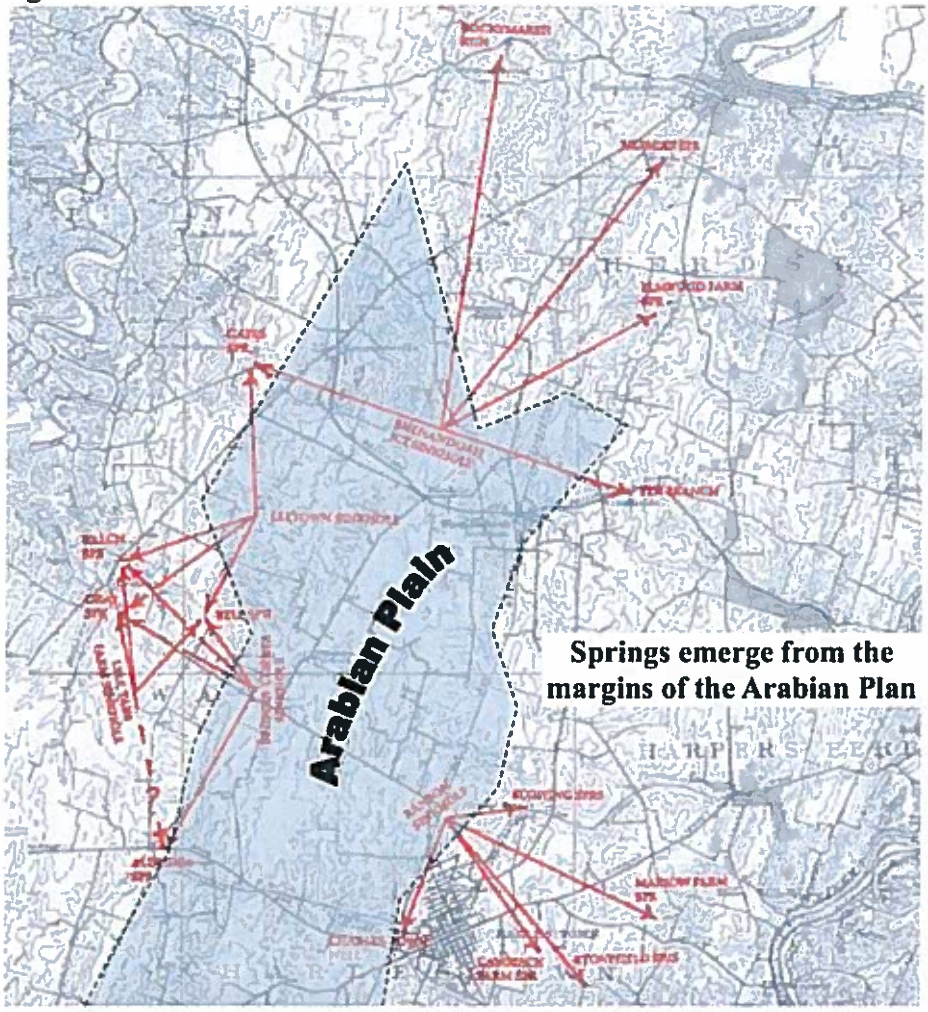
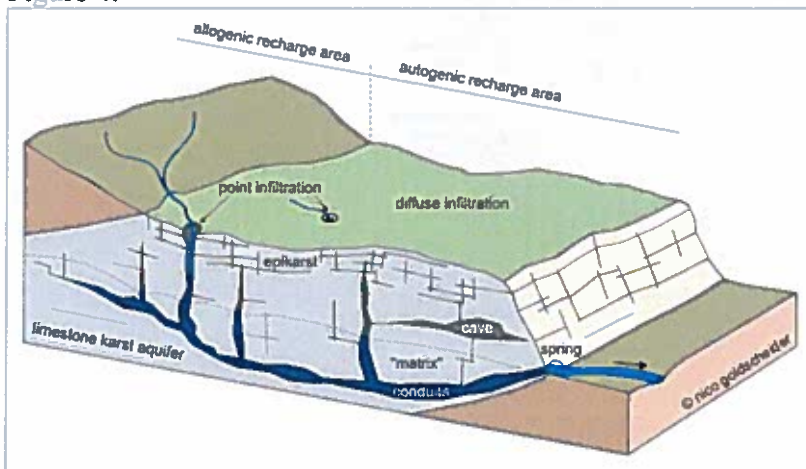


Figure 4:



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Figure 5:

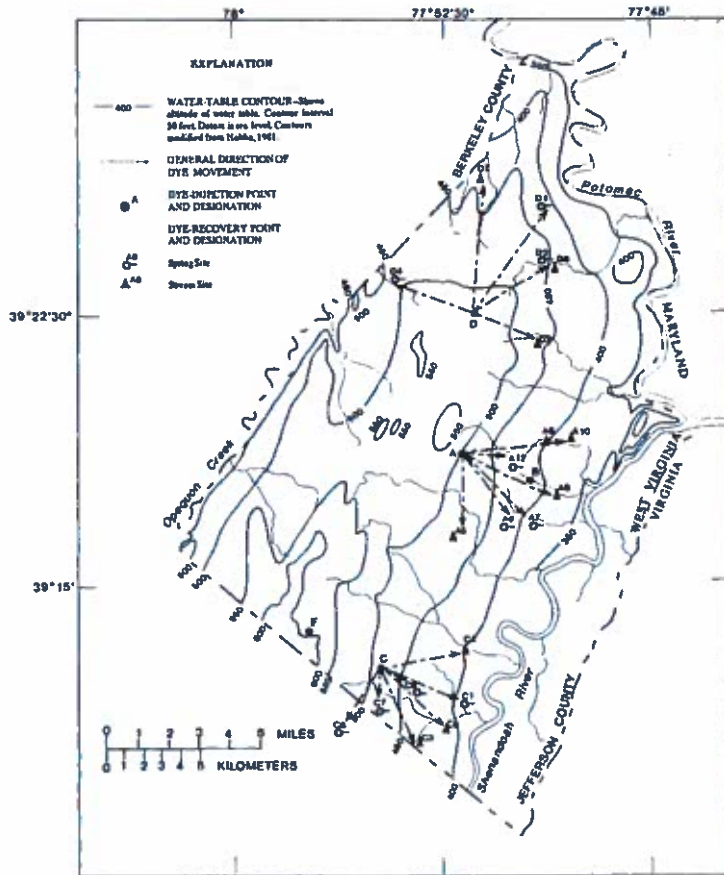
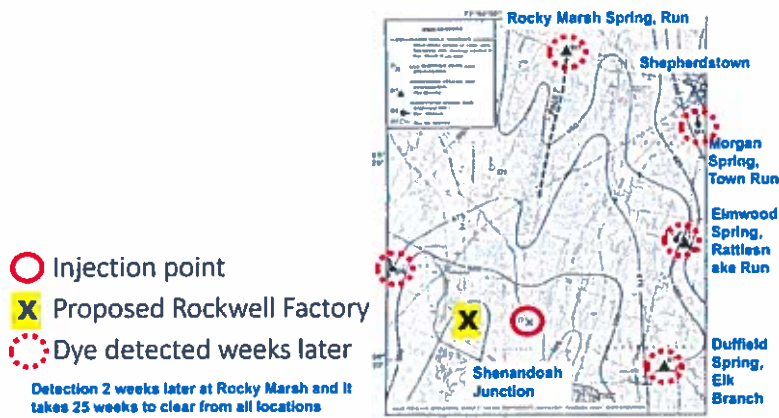


Figure 6:



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Figure 7:

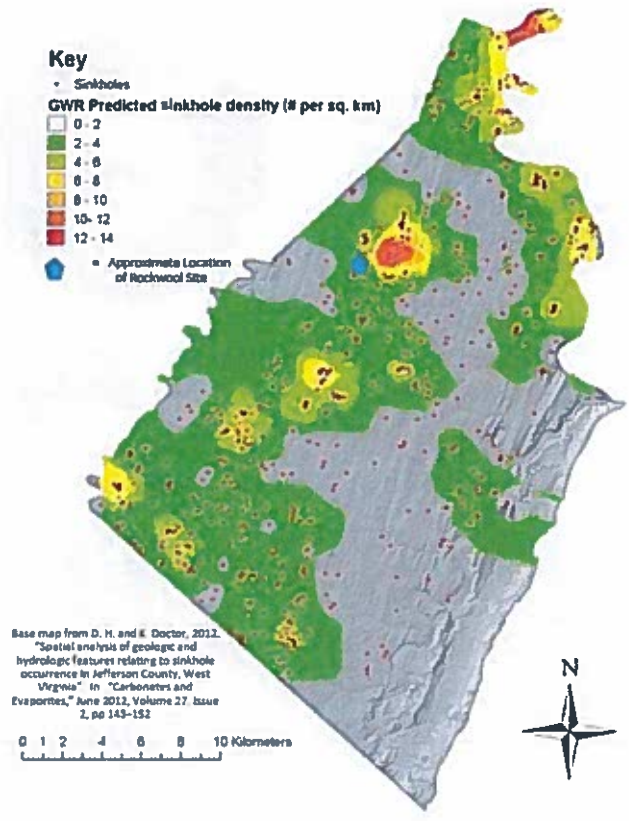
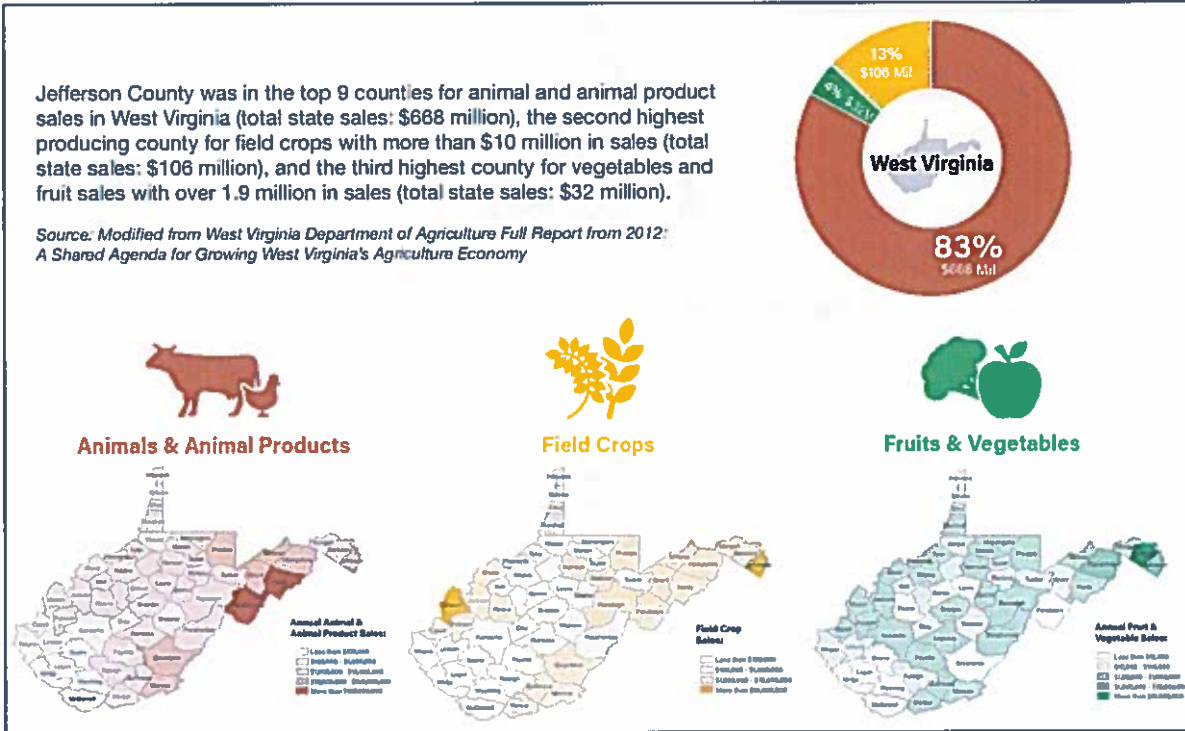


Figure 8:



ERM

www.erm.com

17 June 2020

Ranson City Council
312 S. Mildred St.
Ranson, WV 25438



Submitted via: spfaltzgraff@ransonwv.us

Reference: Comments on Proposed Ordinance #2017-302

Dear Ranson City Council:

Please accept these comments on Proposed Ordinance #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)".

The United States Environmental Protection Agency (USEPA) and West Virginia Department of Environmental Protection (WVDEP) are recognized among the premier environmental regulatory bodies worldwide. Consistent with federal and state law, and operating under the supervision of USEPA, WVDEP has established rules and regulations associated with the construction and operation of sources of air pollution, are developed in conjunction with input and comments from federal staff, state agencies, industry, academics, environmental groups, individual public and other stakeholders. These regulations establish ambient air quality standards, emission limitations, permitting requirement and processes that together are protective of the public health, including that of the most sensitive populations—the elderly, the very young, and those with medical conditions.

Rockwool has followed WVDEP's process for obtaining a Permit for Construction a Major Source (Permit) for the Ranson facility currently being constructed on a portion of the affected property. As part of the Permit process, WVDEP reviewed all information and prepared a draft Permit. The draft Rockwool Permit went through all required public notifications and reviews, including a review by USEPA. Public notice was provided in a local publication, Spirit of Jefferson, and was additionally provided by email to over 500 recipients on a list maintained by WVDEP. No comments were received from the public, but WVDEP addressed comments from the USEPA before issuing the Permit. USEPA also evaluated the Permit using EJSCREEN, which accounts for environmental justice (EJ) factors, and concluded that no EJ concerns were present since none of the eleven primary EJ Indexes were at or above the 80th percentile nationally for the area around Rockwool's facility. The result is a Permit that incorporates the regulatory limits and standards which are protective of public health for even the most sensitive populations. In practice, however, Rockwool's actual emissions are expected to be below even these protective limits.

ERM

17 June 2020
Reference: Comments on Proposed
Ordinance #2017-302
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Since the Permit was issued, Rockwool has also addressed concerns from Virginia's Department of Environmental Quality to its satisfaction. Moreover, Rockwool has exceeded Permit requirements by installing two ambient air monitoring stations to measure the ambient air quality in the area around the facility both before and after operations begins at the facility. To promote transparency, the air quality monitoring results have been and will continue be reported on a publicly available webpage.

Thank you in advance for taking these comments into consideration.

Sincerely,



Jeffrey H. Twaddle
Partner

Stacey Pfaltzgraff

From: Nancey Veldran <para_mounts@yahoo.com>
Sent: Thursday, June 18, 2020 1:37 PM
To: Stacey Pfaltzgraff
Subject: YOU CAN'T HIDE SMOKESTAKES IN KEARNEYSVILLE!

CAUTION: External Email

As a former resident of Ranson, who now lives oh so far away in Charles Town, I am vehemently opposed to Rockwool opening a manufacturing facility in our area. In my travels, I've seen both the clean plants this company operates within its native country as well as the disgustingly filthy plants they get away with operating in developing or third world countries. And they are treating the people of West Virginia, particularly those of us in Jefferson County, as citizens of a third world nation run by oligarchs and criminals. Why would that be if the people running our state, our county and the City of Ranson aren't oligarchs or crooks?

"If you aren't part of the solution, you are part of the problem," is a old slogan from the 60s but it fits here. Please be part of the solution. Jefferson County is still a wonderful place to live, raise kids and have a decent life. Tourism is and should be a major part of our economy, not heavy (albeit labeled as "light") industry. As a property owner and a small business owner, I hope that wiser minds will prevail and keep the Danish smokestacks out of our county.

Nancey A. Veldran, Principal
ParaMounts Artifact & Exhibit Specialists
219 South Church Street
Charles Town, WV 25414
304-279-5691 (mobile/text)

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Ernest Webb <parkerwebb@mac.com>
Sent: Thursday, June 18, 2020 12:14 PM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

SAVE OUR WATER SUPPLY!

I respectfully ask that you vote no on Ordinance #2017-302. While not in Ranson, the land and homes around the property that is the subject of the zoning change are closer to the property than anyone who currently lives within the city limits of Ranson. This area will be affected sooner and more harshly by the environmental issues that will develop secondary to the inappropriate siting of industry this zoning would allow.

The subject land has been well studied by Drs. Kozar, Doctor and Doctor and described in the scientific literature and USGS reports as having karst hydrology with very high aquifer vulnerability. The karst landscape is a consequence of the presence of soluble bedrock, which consists of limestone in the case of the subject land. In such landscapes water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways. Karst aquifers are known to be "extremely vulnerable to pollution" due to direct connection between the surface water and groundwater through both point (sinkholes) and diffuse (everywhere) infiltration. It is known from the Voluntary Remediation Plan of Jefferson Orchard that the groundwater at the subject site is only 60 feet below the ground. The subject property and much of the property around it are on an upland plain with few surface streams, but great seasonal variability in the water table resulting in numerous estavelles and large amounts of water in the epikarst. This water is easily contaminated and this contamination spreads quickly throughout the aquifer. Dye tests performed near the subject site by the USGS have demonstrated this quick moving thorough dispersment in the aquifer in this area. When this contamination goes on to affect springs at the margins of the upland area continuing on in streams that service municipal water sources and the Potomac River, our concerns are far more immediate in both time and distance. Well water is the only water source available in the area of the proposed zoning change and, with the exception of Fox Gleason, a majority of this water is supplied by private wells. Therefore, the groundwater aquifer fulfills a critical necessity, fulfilling all needs including human consumption, household uses, and agriculture and maintenance of livestock and horses in the immediate area around the site. The concern is that if the aquifer becomes contaminated, then the local drinking water will be fouled.

For decades now, policy makers have been using "Aquifer Vulnerability," to set land use and water resource protection policy. Karst has very high Aquifer Vulnerability. Therefore, this industrial use is not appropriate for this land and it should not be zoned for it. The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations."

The Chesapeake Bay Stormwater Network karst stormwater guidance document the CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, which the WVDEP cites in its own guiding document Stormwater Management Design in Karst Areas, clearly agrees stating:

“First, the effect of land development on karst terrain is complex and hard to predict, and requires professional analysis to reduce the risk of geological hazards, damage to infrastructure and groundwater contamination.” “The working group acknowledges that past approaches to stormwater and land development in karst terrain have been inadequate to safeguard the public and the environment.” “...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.” We clearly need stronger comprehensive land use plans and zoning that direct new growth away from karst areas to more appropriate locations. Ordinance #2017-302 is literally the opposite of this.

Further, we cannot rely on the WVDEP to do the job that good local land use guidelines and zoning should do. For example, the CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed states that detention and retention ponds are not recommended on karst and categorize them as discouraged. Also, quoting WVDEP’s own karst guidance: “attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Yet the entity currently planning to utilize this zoning change is planning employment of multiple massive retention ponds and attenuating surface runoff completely. This has already been approved by the DEP in two Construction Stormwater General Permit registrations for that company. One of detention ponds is not even regulated by the DEP as it contains process water and has no outlet. Clearly the DEP recognizes the risks but is not appropriately limiting them. Relying on the DEP to protect the public health, safety, welfare, and the environment from any entity in these karst locations is simply as the CNS bulletin said it “inadequate to safeguard the public and the environment.” We must have appropriate zoning that takes into consideration appropriate use of land with karst hydrogeology. Ordinance #2017-302 does not do this, but instead increases the risk to the public and the environment.

A second serious concern is the air emissions from the industry that this zoning will provide for. These emissions include gaseous NO₂, O₃ (VOC and NO_x), and (SO₂), particulate (PM₁₀, PM_{2.5}, PM_{0.1}), and other hazardous emissions. These types of air emissions have been shown to increase the risk of, contribute to, and exacerbate a multitude of developmental, physical, physiological, physiological, cognitive and economic. The exposure of one individual can cause repercussions in multiple generations. Embryos, fetuses, and children are most vulnerable with effects born out over a lifetime, and that of their offspring. Many of these effects only require short-term exposure and some have even been shown to occur at levels below current limits recommended by the World Health Organization. One example of this is that a recent study found that “Even within the limits set by the World Health Organization, the pollutants PM₁₀, SO₂, NO₂, and O₃ are associated with increased risk of treatment for respiratory diseases in children 0 to 6 years of age.” Unfortunately, the US limits are higher than WHO, 300 % higher in the case of PM₁₀!

In fact, in 2019, in the Advice from the Independent Particulate Matter Review Panel (formerly U.S. EPA Clean Air Scientific Advisory Committee Particulate Matter Review Panel) on EPA’s Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter, it stated that the committee unanimously and unequivocally found that the current primary annual and 24-hour PM_{2.5} National Ambient Air Quality Standards (NAAQS) are not adequate to protect public health. The advice from this 20-member committee, whose scientific disciplines include epidemiology, medicine, toxicology, air quality measurement, air quality modeling, exposure assessment measurement and modeling, risk assessment, statistics, and others, was ignored due presumably to political pressure. Not only are the NAAQS too high in some cases, but due to the measure and mechanism by which they work, they can not replace the safety provided by good land use and zoning regulations, that are meant to do things like keep factories with air emissions and hundreds of heavy trucks away from elementary schools. In fact, there is a state law that prohibits siting a school near a factory. Unfortunately, the reciprocal law does not exist. Clearly, just like with the water resources, we cannot rely on the DEP or the EPA to do the job of what appropriate zoning should do. The whole point of zoning is to keep people safe and provide for their health and welfare. Ordinance #2017-302 puts families and school children directly in harms way.

The air emissions, threat to the groundwater, and the very presence of the industry that this zoning change will allow will have a serious negative economic effect on those who live and or work closest to the site in question. Productivity and workforce participation will be negatively affected by the health effects of the air emissions. The local agricultural operations will be negatively affected by the air emissions with lower quantity and quality of crop yield and would be devastated if the ground water aquifer were fouled. The equine operations in the area, of which there are several, will be negatively affected by the air emissions as they affect the horses' health and performance. The mere presence of industry that will be provided for by this zoning change will cause property values to fall. There will be serious economic consequences for the immediate area around the site in question.

Several of the communities in the immediate area of the site for proposed zoning change are traditionally underserved and have lower economic status. The choice of this location for such a zoning change represents an egregious example of environmental injustice that should not be promulgated or tolerated.

This zoning change will provide for industry that will negatively affect the health safety and welfare of our community. The Comprehensive Plan in Ranson is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." To achieve this, the council must not approve this proposed zoning change. Please vote no on the ordinance #2017-302.

Respectfully, Ernest P Webb

--
Ernest Webb
parkerwebb@mac.com
Ranson 25438

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Mark Wesling <mwesling@gmail.com>
Sent: Thursday, June 18, 2020 12:01 PM
To: gtaylir@ransonwv.us; Stacey Pfaltzgraff; andersonnt5@aol.com; Amanda Stroud; Sco Coulter; Don Haines
Subject: YES #2017-302 YES

CAUTION: External Email

Good Afternoon

I have been a resident and Taxpayer of Jefferson County for 17 years and have seen a large growth in residential construction and with it a large number of commuters.
There has been no new facilities for better jobs in the county this ordinance change would allow for business growth ; job development to allow people living here to work here.
When the opposition group became vocal I researched and attended the program presented by Rockwool.
After this I was in the area of Byhalia Ms and visited the Rockwool facility there and was pleasantly surprised to find t facility looked like the Marketing photos that I had been shown previously . A very clean an orderly operation. This facility had been In operation for Two years and looked like it was opened the day before I visited.
This zoning change would be a great asset to the county Please approve this ordnance #2017-302

Thank You
Mark Wesling
Charles Town

Sent from my iPhone

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Mark Wilson <mountaineer33@gmail.com>
Sent: Thursday, June 18, 2020 2:38 PM
To: Stacey Pfaltzgraff; Gene Taylor; Don Haines; Scott Coulter; Mike Anderson; Amanda Stroud
Subject: Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARC..."

CAUTION: External Email

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARC..."

Jefferson Orchards – WV Home Rule Program

I would like my comments on the Home Rule process in regards to the Rockwool project and rezoning hearing. Clearly the process started with the intention of the property to be a transit hub, not heavy industry. Home Rule state codes are clear-cut and these state rules were not considered during the process that was implemented, ignoring public input as shown below which has been a trend for this project. State Code that should have been highlighted and made comments beside the Home Rule state code that I feel Ranson ignored the law and immediately abandon the rezoning of this parcel because of the violations of this process and state code during the first rezoning process.

WV Home Rule Overview:

THE WEST VIRGINIA MUNICIPAL HOME RULE PROGRAM

The West Virginia Legislature created the Municipal Home Rule Pilot Program in 2007. The enabling legislation was creative in addressing local problems by implementing ordinances, rules, and regulations not otherwise permitted by all municipalities. Bridgeport, Charleston, Huntington, and Wheeling were accepted as the first participants. The home rule statute, W. Va. Code § 8-1-5a, has been amended four times. Most recently, the 2019 legislation opened the program to all West Virginia municipalities (only four Class IV municipalities can currently participate) to be paid by each participating municipality beginning July 1, 2019.

Administration

The Municipal Home Rule Program is administered by the West Virginia Home Rule Board. The Board consists of five voting members:

1. The Governor, or a designee, who shall serve as chair;
2. The Executive Director of the West Virginia Development Office, or a designee;
3. One member representing the Business and Industry Council, appointed by the Governor with the approval of the Board;
4. One member representing the largest labor organization in the state, appointed by the Governor with the approval of the Board;
5. One member representing the West Virginia Chapter of the American Institute of Certified Planners, appointed by the Chair of the Senate Committee on Government Organization and the Chair of the House Committee on Government Organization of the Board.

According to the WV Home Rule website. The City of Ranson is a participant in the Home Rule Program. According to an article Sept 8, 2014.

Evidence of the City of Ranson's intent of using the Jefferson Orchards property which became the loc

"MARTINSBURG, W.Va. — Ranson in Jefferson County, W.Va., would like to use home-rule powers to
of a transit-oriented development."

Additional evidence of Ranson pushing the Home Rule Program and Jefferson Orchards to be a comm
"The new commuter train station in Ranson, estimated to cost about \$5 million, could be built in a spec
Jefferson Orchards site that is zoned for growth, unlike the current Duffields train station, officials said.
It appears multiple meetings trying to get the Jefferson Orchards property to be classified in the Home
"Dubbed Northport Station, the proposal to replace the existing Duffields station was among a few con

of the West Virginia Municipal Home Rule Board in Martinsburg.
The meeting was the last of five such meetings that have been held across the state by the five-memb
as 16 additional municipalities to have home rule. "

https://www.heraldmillmedia.com/news/tri_state/west_virginia/w-va-municipalities-make-their-pitches-

Some evidence of the City of Ranson eliminating the process of the Public's input are shown in the Hc
<https://revenue.wv.gov/homerule/Resources/Pages/Resources.aspx>

LESSONS LEARNED – In the space below, please provide a brief narrative highlighting lessons learn
other municipalities.

This tool allows the City to directly control it property, control economic development incentives and re
government (i.e. building commission, economic development authority) because the City can enter in

SUCSESSES – In the space below, please provide a brief narrative highlighting successes realized th
performance.

The City has used this tool for the first time in 2017 for economic development purposes resulting in th
unutilized City property and increased property tax collection. This tool will be important because it **will**
development and neighborhood revitalization. The enactment of this ordinance allows the City to sell t
convey the property through a building commission, redevelopment agency and economic developme
allows for the City's vision to be carried out without being diluted by outside agencies.

The City foresees using this tool in 2018 for a larger economic development project.

And Eliminating the Building Code Inspector.

"This amendment will exempt Ranson from the code official/inspector licensing authority delegated to

City Council and the Mayor is designated as the Community Enhancement Board.

1. The Ranson City Council, may in its discretion, declare the City Council and Mayor to be and act as
13E- 6(c) and shall be vested with all the powers, duties and responsibilities of such Board described
2. (b) The declaration by the City Council designating itself as the Community Enhancement Board sh
Enhancement Board authorized by Sec. 20-60.

<https://www.cityofransonwv.net/DocumentCenter/View/615/2014-10-09-Community-Enhancement-Di>

The ultimate use for Rockwool on Jefferson Orchards appears to be conflict of the Home Rule WV Sta
(i) The municipalities participating in the Municipal Home Rule Program may not pass an ordinance, a
that is contrary to the following:

- (1) Environmental law; - **Conflicts of WVEPA data models are well documented. Even the data model:**

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

of each year, the Municipal Home Rule Board shall give a summary report of all the participating municipalities. (o) Notwithstanding any other provision of this code to the contrary, a distributee under the provisions of this section shall receive a refund of revenues or moneys collected by, or remitted to, the Tax Division of the Department of Revenue a refund of revenues or moneys collected by, or remitted to, the Tax Division of the Department of Revenue other retrospective adjustment relating to any amount distributed, to the extent that the moneys in question are not otherwise distributed, regardless of whether those distributions were miscalculated, mistaken, erroneous, misdirected, or otherwise. "distributee" means any municipality that has enacted a sales and use tax under this section or as otherwise provided. The Department of Revenue shall make a specific distribution of revenues or moneys collected by, or remitted to, the Tax Division of the Department of Revenue.

References:

<https://www.wvlegislature.gov/wvcode/chapterentire.cfm?chap=8&art=1§ion=5a>

<https://www.cityofransonwv.net/DocumentCenter/View/615/2014-10-09-Community-Enhancement-Dis>

https://www.heraldmillmedia.com/news/tri_state/west_virginia/w-va-municipalities-make-their-pitches-

<https://www.cityofransonwv.net/DocumentCenter/View/615/2014-10-09-Community-Enhancement-Dis>

<https://revenue.wv.gov/homerule/Documents/Ranson/100316RansonAmendment.pdf>

This change in zoning is not appropriate for this land and this area. This land itself is not well suited for residential use and would severely adversely affect the health, safety and welfare of our community. Please vote NO on the Ordinance #2017-302, the Home Rule program and the conflict of the WV state Code and the Home Rule process that should be followed for the rezoning process or rezoning the Jefferson Orchards property, so please vote NO on Ordinance #2017-302 but

Sincerely yours,
Mark Wilson
Kearneysville, WV



ReplyForward

Stacey Pfaltzgraff

From: mwilts <mwilts@comcast.net>
Sent: Thursday, June 18, 2020 12:41 PM
To: Stacey Pfaltzgraff
Subject: Regarding public comment

CAUTION: External Email

Greetings,

I am a lifelong resident of Jefferson County and wish to comment on the Industrial District Ordinance supposedly being considered but suspect it is just a formality for approval. I am disappointed to see that air and water concerns are not be considered and find it hard to believe our health and wellbeing are considered unimportant. I happen to be down wind and downstream of the proposed site.

I rely on ground water for consumption and if it is contaminated I will most likely become reliant on some government resource for help or worse have no recourse at all. Mountaineers are supposed to be free, and clean water is a necessary part of maintaining that freedom.

If my ground water becomes contaminated be assured that I will do everything in my power to hold the corporation (Ranson) responsible for compensation and will pursue every avenue of recourse, spending the rest of my life and resources in pursuit of it if needed.

I'm not the sort of person who demonstrates or comments negatively on many issues. I can tell you this issue is very, very important to me.

I certainly hope that your endeavors work out for the better. I also hope the people of Jefferson County will not be adversely affected long term by the decision you make on this issue. Once a valuable resource like ground water is gone there is no way to bring it back.

Sincerely,

James M Wiltshire
 Mwilts@comcast.net
 151 New Way Drive
 Shepherdstown, WV 25443

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Stacey Pfaltzgraff

From: Chrissy Wimer <clwimer1@yahoo.com>
Sent: Thursday, June 18, 2020 4:33 PM
To: Stacey Pfaltzgraff; Duke Pierson; Gene Taylor; Scott Coulter; Tony Grant; Amanda Strc
 Mike Anderson; Don Haines
Subject: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING
 MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20
 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT
 DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"
Attachments: Ordinance #2017-302 Public Comment.Jefferson County Foundation.Wimer.pdf;
 Ordinance #2017-302 Public Comment Jefferson County Foundation Wimer
 Appendix.pdf; Public-Comments-on-WVR108876-and-WVG611896-Wimer-Jefferson
 County-Foundation-.pdf; Petition-RE-Industrial-Stormwater-Permit-Application-No.-
 WVG611896-Wimer.fn1_(1).pdf; 1-s2.0-S0048969718338543-main 2.pdf

CAUTION: External Email

Dear Ms. Pfaltzgraff,

Please accept this and all attachments and linked documents as written public comment for the above referenced hearing. Please also find attached an appendix file that has figures to accompany the written letter and three supporting documents referenced in the letter. Please also refer to [this li](#) for the exhibits referred to in the Petition to the WVDEP (PDF is attached).

Thank you.

Best regards,
 Christine Wimer

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Jefferson County Foundation, Inc.

June 18, 2020

City of Ranson Council Members
312 S. Mildred St.
Ranson, WV 25438

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Dear Mr. Mayor and Council Members:

I respectfully request that you vote no on Ordinance #2017-302. This zoning change will violate the intention of the comprehensive plan of Ranson to provide ample affordable housing in complete communities that will allow residents to live, work, and shop in the same community. Instead, it will promote replacing them with a single-use area that would be a separate pod of land use. This zoning change will also allow land to be used for industry that it is totally inappropriate and ill-suited to, endangering the water resources and water safety. Through its air emissions, effects on local industry, and water quality the industry this zoning will provide for will adversely affect the health, safety and welfare of the community. This zoning change adds no additional advantage to the residents of Ranson and violates the comprehensive plan in several key areas working in contrast to the goals, objectives and actions of the comprehensive plan. This will result in consequences that were intended to be prevented by the comprehensive plan. Please vote NO zoning ordinance #2017-302.

1.0 Community Planning

In chapter 3 of the 2012 comprehensive plan of Ranson, the Private Realm the introduction states: "Today, the vision for the land in the Urban Growth Boundary is multiple neighborhoods using distinctive names to create their own identity and preserve the small-town atmosphere. Each of these neighborhoods should have its own commercial center to support their local needs and reduce trip generation." (page 27, 2012 comprehensive plan) In this section and throughout the document, the comprehensive plan continues to reiterate that complete communities and neighborhoods are the goal and that large tracts of land dedicated to a sole type of use that do not allow integration into the community is not in alignment with the plan. This zoning change would literally eliminate a complete community, and replace it with a large tract of land for a sole use. Further, this sole use is inappropriate to be integrated into a community, so it would become a pod of separate land-use.

The first Private Realm objective in chapter 3 is listed as "1. Maintain the historic mix of housing with businesses. Mixed use should be the norm throughout neighborhoods, districts, and

PO Box 460, Ranson, WV 25438
Jefferson County Foundation, Inc. is a 501(c)3 Non-Profit organization.

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

corridors. **Single-use areas should be the exception.** Every place within each neighborhood should have a **variety of compatible uses and building types.**” (page 27, 2012 comprehensive plan) Figure 2.3 the sector map of the 2012 comprehensive plan is underlain by the following passage: “The Sector Plan is the primary planning tool in the Urban Growth Boundary for guiding future growth. Instead of planning for **pods of separate land uses**, the Sector Plan plans for **complete Communities** – compact, pedestrian-oriented, mixed use neighborhoods as well as identifying areas to remain suburban for the near term.” In section 3.1 Land Use in the general introduction, it states: “Neighborhoods, districts and corridors are the essential elements of development and redevelopment in the City. They form identifiable areas that encourage citizens to take responsibility for their maintenance and evolution.” (page 29, 2012 comprehensive plan) Under section 3.1.2 preferred development, it states: “Community types include: historic preservation of the existing Old Town neighborhoods; redevelopment and renewal of existing neighborhoods, and **new complete neighborhoods** as the preferred development pattern for expansion.” (page 34, 2012 comprehensive plan) It is made abundantly clear throughout the Private Realm section and particularly the Land Use section of the 2012 Comprehensive Plan that the focus and goal of the comprehensive plan is to develop new complete communities as growth is expanded into the undeveloped urban growth boundary.

It is also clear that Jefferson Orchard including the land in question is within the urban growth boundary and slated for this type of development. In section 3.1 Land Use of the 2012 Ranson Comprehensive Plan, under General, it states: “The undeveloped land within the Urban Growth Boundary is planned for **complete communities** that support the economy and quality of life of Old Town Ranson.” (page 29, 2012 comprehensive plan) According to figure 2.3, the sector map on page 21 of the 2012 Ranson Comprehensive Plan, the land under consideration for this zoning change is in the G3 Preferred Growth designation along with the remainder of Jefferson Orchard (Exhibit x). Table 2.1 on page 20 of the comprehensive plan defines G3 Preferred Growth as intended for Preferred Expansion. (Exhibit x) Therefore, the land being considered for this zoning change and all of Jefferson Orchards is undeveloped land within the Urban Growth Boundary that is, according to the 2012 comprehensive plan, preferred for development and as such, again according to the plan, it should be planned for a **complete community** as directed in section 3.1 as quoted above. The 2012 zoning plan for the development of Jefferson Orchards **provided for complete communities** that supplied much needed affordable housing, parks schools and community centers within walking distance for residents, and neighborhoods where residents could live, work and shop. In contrast, this proposed zoning change reduces the production of affordable housing, eliminates a planned complete community, and due to the current land owner’s insistence that the adjacent development be limited, **would lead to a single-use area or pod of separate land-use.**

2.0 Housing

Ranson has a history — even before incorporation — of having affordable housing and throughout the 2012 Comprehensive Plan, affordable housing is clearly a priority. There are many locations where this priority is highlighted, a few of them are highlighted here. In section 3.1, under General Land Use Actions number 1, Revise the Zoning Ordinance via the Smart Code section “c” states: “Encourage a variety of building types – particularly for affordable

housing.” Number 5 of this same section states: “Support affordable low-cost housing.” On page 37 under section 3.2 housing, it states: “Since the Department of Housing and Urban Development has established that a household should spend no more than 30% of its annual income on housing, affordable housing solutions is paramount to Ranson’s future.” (page 37, 2012 comprehensive plan) On page 37 still under housing, it states: “Through the Federal grants and the planning that has resulted, the City is poised to replace outdated, use-segregating ordinances with those that can enable affordable solutions.” (page 38, 2012 comprehensive plan) On page 39 under section “f” of housing actions, it states: “When selecting sites for affordable housing, consider proximity to workplaces. For many people, transportation is second only to housing in cost. Public transportation and sheer proximity to work, shopping, and amenities can reduce transportation costs – and make the combination of transportation and housing more affordable.” (page 39, 2012 comprehensive plan) It is obvious that the intention of the comprehensive plan is to provide for the development of affordable housing.

Further, it is clear as discussed in the above section that the plan intends this affordable housing to be in complete communities where common facilities (i.e. parks, schools, community centers) are provided and residents can live work and shop in the same community. In section 3.1.1 Community Design under Community Design Action number 3.a., it states: “Do not allow concentrations of poverty to develop.” Similar statements are made on page 32, 44, 101, and 114 of the comprehensive plan. This it is also clear that the comprehensive plan does want this affordable housing to be concentrated in less desirable areas that become concentrations of poverty. Complete communities solve this by planning an appropriate mix of housing where the “overall standard should be raised to that usually demanded by business people.” (page 39 of the Comprehensive Plan section 1.e. of Housing Actions) This allows individuals and families of all incomes to live and enjoy the same neighborhoods with less need for travel and more healthy communities.

The current zoning change would remove hundreds of housing units further limiting the affordable housing that Ranson can provide. One entire complete community will be removed and replaced by expanding a single use tract of land that contains no housing. The entity that currently plans to utilize this zoning change will make this area so undesirable that those who can afford to live elsewhere will not plan to live in a new community near this facility. Further, in those communities that currently surround the site being considered for rezoning, the great majority of those who can afford to leave the area will. This will further depress this already relatively and historically lower income underserved area. If the remainder of Jefferson Orchards is developed into a new community, only those who cannot effectively find housing in more desirable locations will move here. This will effectively create a “concentration of poverty,” to develop in the area surrounding this zoning change.

The entity currently planning to utilize this zoning change has attempted to limit further development in the remainder of Jefferson Orchards effectively steering it away from new community development. This would further reduce affordable housing development, create a pod of separate land use, and increase trip generation. All of these are listed as things that should be disallowed by further development.

3.0 Environmental Objectives

The comprehensive plan clearly intends for environmental concerns to be taken into account and specifically addresses this in multiple sections of the plan. The clear objective of the plan is to protect the environment from degradation and allow residents from noxious entities by designating land for appropriate uses through appropriate zoning.

3.1 Respect Adjacent Natural and Other Open Areas

Under section 3.1.3 Redevelopment and Renewal Objectives, it states: “1. Ensure that redevelopment respects adjacent natural and other open areas. Redevelopment abutting open areas should meet them sensitively, both in terms of appearance and in environmental terms.” (page 35, 2012 comprehensive plan) The area to be rezoned abuts open natural areas that are in the county. The proposed zoning change would provide for industry that would be sensitive in neither the appearance nor environmental terms. The entity currently planning to utilize the zoning change will have air emissions that include large amounts of PM10. The entity’s own air modeling reveals that a majority of this will fall to the ground in the immediate vicinity, adversely affecting the abutting open areas. This zoning change would violate this objective of the comprehensive plan.

3.2 Avoid Noxious Uses

In Chapter 4 section 4.5 Natural Environment, subsection Natural Environment Objectives, number two states: “Avoid noxious uses in the annexed area. In this case, a ‘noxious’ use is one which poses a hazard, or which nobody would like to live or have their food grown near...” (page 84, Chapter 4, section 5, Natural Environment subsection, Natural Environment Objective, number 2.). This zoning change will achieve exactly the opposite; it will provide for a very noxious use that nobody would like to live near or have their food grown near. In fact, the entity that plans to utilize this zoning change itself has said on many occasions, both publically and privately, that they do not wish to be sited next to residential areas and it is their stated company policy not to build plants close to residential areas. This zoning change would provide for industry that would produce large amounts of particulate, gaseous, and hazardous air emissions, create noise pollution, light pollution, and seriously threaten the groundwater. Uses deemed noxious “include uses such as: a. Meatpacking and slaughterhouses, b. Incineration, and c. Landfills.” The issue with these examples is exactly the same as the issues with the entity that is planning to utilize the zoning change: sights, smells, sounds, air pollution, and groundwater contamination. These attributes clearly adversely affect the health, safety, and welfare of the community and therefore cause people to not want to live near or have their food grown near these entities. This zoning change would clearly violate this section objective of the 2012 comprehensive plan.

It goes on to say under the Natural Environment Actions, number 3 shall be to “amend the Zoning Ordinance and the Subdivision Ordinance via the SmartCode to prohibit noxious uses within land annexed into the Urban Growth Boundary. To the extent possible, work with Jefferson County and the State to eliminate noxious uses from land that may be annexed by Ranson.” Action number 4 states: “Develop design guidelines for the land in the Urban Growth Boundary, based on both sound urban design principles and upon ecological and agricultural

principles. For example, guidelines may cover which land to develop to what level, sightlines, and surveys of karst geology. These may become regulatory or advisory.” This demonstrates it is the expectation of the comprehensive plan that zoning will be used to not just deter but “prohibit” noxious uses within land annexed into the Urban Growth Boundary exactly like Jefferson Orchards. This zoning would violate these prescribed actions in the comprehensive plan and literally achieve exactly what the comprehensive plan is attempting to avoid.

3.3 Protecting Karst Areas and Water Resources

In chapter 4, section 4.5.1, Geology and Hydrology, on page 85, the comprehensive plan states in full the following:

“Ranson sits on Shenandoah carbonate bedrock with solution channels. These channels are the primary way precipitation gets into the water table. Percolation through the carbonate rock dissolves the rock and enlarges minute fractures. This has produced a karst geology, with caves, sinkholes, springs, ‘losing’ streams, and underground streams. Sinkholes are formed when the carbonate rock below the surface is eroded by water, and the surface collapses into a depression. These sinkholes provide an avenue for groundwater recharge. However, they can also sluice stormwater runoff or hazardous materials into the aquifer. Within the Urban Growth Boundary, the groundwater is as little as 25 feet below the surface.

Geology and Hydrology Objectives

1. Buffer any hazardous materials and proposed development and direct stormwater runoff, treated or untreated, from sinkholes. This may require a distance buffer. It may also require an engineered solution – depending on the geology and hydrology.

Geology and Hydrology Actions

1. Require adequate planning during the development of land. Given the nature of the karst geology, not to mention that of rivulets leading to streams, a one-size-fits-all approach should be avoided, in favor of sound engineering.”

This reveals an expectation from the comprehensive plan to consider the suitability of land based on its karst hydrogeology. Karst hydrogeology as explained above has high aquifer vulnerability leading to a high risk of groundwater contamination depending on the surface land use. In fact, a simple search of the peer reviewed scientific literature reveals that policy makers have been using “Aquifer Vulnerability”, to set land use and water resource protection policy for decades.¹

The guiding documents of the WVDEP recognize that industrial uses are not appropriate for these locations. In the guiding document supplied by the WVDEP *Stormwater Management Design in Karst Areas*, it states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”² This demonstrates an obvious desire by the WVDEP for local governments to take on the

responsibility of limiting environmental impact through appropriate land use regulations and zoning. It is also clear the 2012 comprehensive plan intended to provide these protections.

The Chesapeake Bay Stormwater Network karst stormwater guidance document, the *CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed*³, which the WVDEP cites in its own guiding document, *Stormwater Management Design in Karst Areas*, clearly agrees stating:

“First, the effect of land development on karst terrain is complex and hard to predict, and requires professional analysis to reduce the risk of geological hazards, damage to infrastructure and groundwater contamination.”

“The working group acknowledges that past approaches to stormwater and land development in karst terrain have been inadequate to safeguard the public and the environment.”

“...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”

We clearly need stronger comprehensive land use plans and zoning that direct new growth away from karst areas to more appropriate locations. Ordinance #2017-302 is literally the opposite of this.

This particular site of Jefferson County has mature karst hydrogeology with very high sinkhole development vulnerability⁴. The maps in Figure 1 show that the entire area in question is underlain by Conococheague or Stonehenge limestone commonly found in areas of advanced karst. In such landscapes, water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways (Figure 2).

Karst aquifers are known to be “extremely vulnerable to pollution,” due to direct connection between the surface and underlying high permeability aquifers.⁵ The site is on an upland area with relatively few surface streams, seasonal variability in the water table that results in numerous esteves, and large amounts of water in the epikarst. This water is easily contaminated because of diffuse infiltration of surface water into the groundwater through the porous bedrock and point infiltration through sinkholes (Figure 3). The springs at the margins of the upland area are directly affected by the water quality throughout the aquifer (Figure 4).

The groundwater at this site is 60 feet or less below the ground⁶, and it is known from dye studies that this water moves through the ground and back to the surface relatively quickly. In a dye test, the USGS found that the water from just adjacent to this site emerged in the headwaters of both the Elk’s Run and Rattlesnake Run⁷ (Figure 5). The Elk’s Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figure 6). The Elk’s Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figure 6). One of the six springs that feeds the town run in Shepherdstown runs right through the middle of town where children play and learn to fish. The headwaters of Rattlesnake Run are a spring

about 3.5 miles from the site and which is also a tributary of the Potomac River. These are just three of the examples the dye test demonstrated of how the groundwater at the site communicates with and affects the surface waters in the county. This site is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams.

Karst hydrogeology has very high “aquifer vulnerability” due to the diffuse and point infiltration⁸. Karst is known to have “severe ground instability problems”⁹. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater through point infiltration. As shown in Figure 2 sinkholes may develop quickly and the ground surface may show no signs of a sinkhole prior to collapse. The particular site is located in the area with the largest sinkhole density in Jefferson County (Figure 7).¹⁰

A study demonstrated that in this area, several factors increased the rate of sinkhole development, including presence of surface water and development. Therefore, the large weighty buildings, drastic changes in ground contour, and centralized stormwater management that is typically required by heavy industry will actually make the karst situation worse, causing karst features to develop and progress more quickly. This was exemplified by the current construction project, where 19 sinkholes developed thus far during construction. In the current owner’s own geotechnical investigation report prepared for Thrasher Engineering by Specialized Engineering, it states the following:

“Some sinkholes failures can be induced by construction activities and are of significance because the sinkholes can directly affect the site being developed, either immediately or some years later. Construction activities that can trigger sinkholes include 1) diversion or impoundment of drainage or dewatering activities, 2) removal of overburden cover, 3) shock vibrations, such as blasting, and 4) increased loading.

Prediction of sinkhole location or occurrence is difficult, if not impossible, and there is always a significant degree of uncertainty associated with the occurrence of future sinkholes. Structures built within the area of influence of a sinkhole can also be affected by sinkhole collapse or subsidence.

By virtue of the underlying geologic formation, the Owner must acknowledge there is an inherent risk of potential ground subsidence or collapse associated with construction of structures in karst terrain. All sites in karst terrain have the potential for sinkhole formation.”¹¹

Even a firm employed by industry recognizes the negative effects of development in karst and the dangers it imposes. The entity that is currently planning on utilizing the zoning change has taken every opportunity to use the minimum requirements and least expensive routes with little described understanding of or regard for our environment (please see attached written public comment and citizens petition to the DEP) This also demonstrates that we cannot trust industry entities to “do the right thing”. This is why appropriate zoning is so necessary. We can’t trust business to do what government should.

The Chesapeake Bay karst stormwater guidance document¹², which WVDEP cites in the *Stormwater Management Design in Karst Areas*¹³, clearly states “the working group notes that while communities that incorporate this guidance into their development review process can reduce the incidence of infrastructure damage and groundwater contamination, there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations”. These policies recognize some types of land use can increase the amount of surface contamination and that in combination with high aquifer vulnerability the likely hood of ground water contamination is much greater. This is why industry in such locations is so inappropriate.

The comprehensive plan is clear that the risk of hydrogeology should be taken into account when determining land use. The business entities cannot be expected to do the job of good zoning and land use regulations. The WVDEP does not have the power to do the job of good zoning and land use regulations. Therefore, the council cannot abdicate the duty of maintaining appropriate zoning that will protect the community and groundwater from inappropriate uses of land with karst hydrogeology and high aquifer vulnerability.

4. Land Use Objectives

Under land use objectives number ten states the following:

“10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community.”

Manufacturing and assembly-line facilities could have located in Ranson in this area as it is currently zoned. Additionally, with current zoning such entities would help Ranson achieve the remaining goals, objectives, and actions laid out in the comprehensive plan addressed above herein. Therefore, no zoning change is needed to accommodate manufacturing and assembly-line facilities. The proposed zoning change, however, is required to allow the particular manufacturing entity that is planning to utilize it and the desires of the current landowner. Unfortunately, this zoning change will also violate the entire second half of Land Use Objective number 10 as quoted above, and all of the goals, objectives, and actions of the 2012 comprehensive plan as discussed above.

4.1 Land Suitability

The land that is subject to this proposed zoning change is not just ill suited to this proposed use but completely inappropriate. The karst hydrogeology as detailed above makes this land totally ill-suited to this type of industry. The location is inappropriate as it is close to schools and neighborhoods. The entity that currently plans to utilize this zoning change will through its stormwater handling and air emissions pose great risk to the ground water and surrounding people and industry (see attached public comment to DEP, and Petition to DEP, and section 4.2

herein). By allowing this land to be used by this type of industry this zoning change would violate this section of the 2012 comprehensive plan of Ranson.

4.2 Adversely Affect Human Health

In the comprehensive plan of 2012 in Land Use Objective number ten states: the City “will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community.” In fact, the industry this zoning change will allow will be detrimental to the physical and mental health of humans living, working, going to school and even visiting the area. There will be downstream effects on personal and community economic, social and societal metrics. This zoning change would violate this land use objective.

Air pollution created by the industry this zoning change would provide for consists of both gaseous and particulate-matter pollutants. The gaseous includes nitrogen dioxide (NO₂), ozone (O₃ emitted as VOC and NO_x that interact to release O₃), and sulfur dioxide (SO₂). Particulate matter includes particulate matter of varying diameter, and classified by cutoff points — less than 10 μm (PM₁₀), less than 2.5 μm (PM_{2.5}), and that of more recent focus less than 0.1 μm (PM_{0.1}). Because of their small size, these particles can be inhaled deeply into the lungs and deposited in the alveoli. This particulate matter is a complex mixture of many things including metals, elemental and organic carbon. The PM_{0.1} have a higher carbon content, larger combined surface area (increasing contact area), and greater potential for carrying toxic compounds. While not usually measured, the other air contaminants referred to as hazardous pollutants are also very important as they contain among other things neurotoxins and carcinogens.¹⁴ Key drivers of the air pollutants are mining, smelting, and petroleum combustion. These are all processes undertaken or supported by the industry provided for by this rezoning.

Humans are exposed to air pollution through inhalation, ingestion, and contact with skin and mucus membranes. Children are especially vulnerable to the latter two since they are more likely to play on the ground outdoors and more likely to put things in their mouths. Air pollution is the most significant cause of pollution related disease (6.4 million deaths/year).¹⁵ This pollution increases the risk of multiple non-communicable diseases in children including asthma, low birth weight, cancer, birth defects, obesity, diabetes, cardiovascular disease, mental health problems and neurodevelopmental disorders, and increases the risk of chronic obstructive pulmonary disease, cardiovascular disease, stroke and cancer across the lifespan of a person exposed as a child.¹⁶ In fact in 2015 pollution was responsible for 21% of deaths from all cardiovascular disease, 51% of deaths due to chronic obstructive pulmonary disease (COPD), and 43% of deaths due to lung cancer.¹⁷

According to the National academy of science, Children are inherently more sensitive to the effects of air pollution for four distinct reasons.¹⁸

1. Children breathe more air on a per pound basis each day, thus increasing their exposure.
2. The pathways by which mammals detoxify and excrete toxic substances are not fully mature in children and thus less efficient.

3. There are periods in early development with exquisitely delicate developmental processes that are exceedingly sensitive to disruption, and exposure to even low doses of pollutants during this time can increase risk of disease in childhood and across one's lifespan.
4. Exposure in childhood leaves more years of life for diseases to develop that require longer times to develop (long latency period diseases).

Exposure to air pollution in early human development, especially exposure to fine particulate pollution, can be extremely deleterious to children's health and development.

4.2.1 Adverse In Utero Developmental Effects

Cells that make up the embryo and fetus (germ and fetal cells) divide and replicate rapidly and therefore are more sensitive to outside pressures from exposure to foreign substances and disruptions in cellular communications.¹⁹ When polluted air is inhaled some components may cross the blood-air barrier of the lungs into the circulation. The circulation carries them to the placenta. Some of these pollutants cross the placental barrier, affecting the embryo and depositing in the fetus creating permanent fetal abnormalities.²⁰ This leads to impaired organ development, disturbed development of the immune system, premature birth, lower birth weight, and increased infant mortality.²¹ These early changes lead to long-term effects including increased disease development in multiple organ systems throughout life, cognitive defects, achievement deficits, and negative psychological social and economic effects.²² Fetuses may also be affected by the socioeconomic status and life choices of their families both of which have been shown to be affected by air pollution their family members were exposed to (see below). Even worse there seems to be a generational effect, with offspring being affected by the air pollution to which their grandmothers were exposed.²³

4.2.2 Adverse Neurodevelopmental Effects

The central nervous system is increasingly recognized as being affected by air pollution. When particulate matter is inhaled, it may cross the blood-air barrier of the lungs into circulation. The circulation carries it to the brain where it has neurodegenerative effects or the placenta where it creates fetal abnormalities.²⁴ Effects on both the brain and fetus are certainly also effected by air pollution through secondary pathways.²⁵ Gestational exposure to air pollution and especially ultrafine particulate matter affect both embryonic neurodevelopment and brain growth and maturation in early life. Gestational exposure increases the risk of early cognitive deficits, low birth weight, prematurity, and neurodevelopmental disorders²⁶. An association between autism and prenatal exposure to particulate matter in air pollution has been suggested by several case-control studies.²⁷ A 2019 Study²⁸ looked at a national sample of US children, evaluated the relationship between exposure to air pollution and cognitive outcomes. It found that annual and cumulative measures of air pollution during third grade were significantly associated with lower math test scores. This was likely attributable to exacerbation of asthma symptoms, other decreased health parameters, increased fatigue, or a direct neurodegenerative effect. Two earlier studies found similar outcomes for math and reading/English/language in elementary students exposed to elevated air pollutants including

particulate matter, ozone, and nitrogen dioxide.²⁹ Air pollution has also been linked to several parameters with indirect effect on achievement and cognitive ability including school absences³⁰. Ample evidence for other structural and functional changes in the neurological system and neurodevelopmental progression exists in small studies, and animal models. As further studies are conducted, the impact of air pollution on these areas will be shown to be more devastating.

4.2.3 Adverse Respiratory Effects

The human respiratory system develops in utero, through adolescence, and does not actually stop until late teens early twenties depending on sex. The first 6 years of life represent the most extensive period of growth and account for 80% of development. This time period is therefore the most sensitive both because the lungs are developing rapidly and because they are not developed yet so the airways are narrower and there are fewer alveoli.³¹ Exposure to air pollution during the first 6 years of life can damage the lung tissue, impair lung growth, and alter the development of immune function and repair mechanisms within the lungs.³² These effects increase both short and long-term risk for asthma, chronic obstructive pulmonary disease (COPD), lung cancer, and respiratory infections.

Air pollution increases the rate of asthma development in both children and adults. Particulate matter, ozone, and sulfur dioxide contribute to allergic inflammation and pulmonary immune dysfunction in animal models, both strong contributors to asthma³³. Change in lung function is also seen with both short and long term exposure to air pollution in both children and adults. Air pollution not only causes increased risk of asthma, but even short term exposure causes asthma symptom exacerbation, significantly increasing the hospitalization, reduced lung function and increased airway responsiveness in asthmatic children.³⁴ A 2019 study found “Even within the limits set by the World Health Organization, the pollutants PM10, SO₂, NO₂, and O₃ are associated with increased risk of treatment for respiratory diseases in children 0 to 6 years of age”. It is important to note that the US limits are set higher than the WHO, 300 % higher in the case of PM10!

While the development of COPD is most often associated with smoking, outdoor air pollution exposure increases the incidence or cases of COPD. Short term increases of PM10 and other air pollutants can cause existing cases of COPD to get worse, increasing the risk of acute exacerbation, hospitalization, and death from COPD symptoms in patients that already suffer from COPD.³⁵

Smoking is considered the largest cause of lung cancer, however the International Agency for Research on Cancer designated outdoor air pollution and PM as a Class I human carcinogen³⁶. Numerous studies have shown that increased exposure to PM_{2.5}, SO₂, NO₂, and diesel exhaust cause an increased incidence or risk for multiple types of lung cancer.³⁷

While not as extensively studied, it is clear from the studies that do exist that children, the elderly and those with pre-existing conditions are made more susceptible to developing exacerbated respiratory infection symptoms and increased need for emergency intervention when exposed to air pollution.³⁸

4.2.4 Adverse Immune Effects and Autoimmune Consequences

Immune development starts in utero and continues through the first several years of life; disruption in this process can cause autoimmune diseases. Autoimmune diseases are on the rise in developed countries. Studies have shown that oxidant air pollutants, ozone and nitrogen dioxide were associated with an increased risk of incident asthma and eczema in children.³⁹ Both of these diseases are autoimmune diseases and represent inappropriate immune tolerance development. Furthermore, a review of 36 experimental studies revealed that particulate matter, diesel exhaust particles and ozone fundamentally changed cytokine (cell communication tool or molecule) production and cell functions inducing airway hyperresponsiveness and increasing susceptibility to infection and allergies.⁴⁰ Therefore air pollution contributes to and increases the rate of autoimmune diseases affecting several body systems and increases susceptibility to further morbidity (disease). This is one of the reasons the 1918 flu hit Pittsburg so hard. The appropriate cellular communication and immune response had been disrupted by chronic air pollution exposure leaving people's lungs ill-equipped to deal with the virus. In fact, the hypersensitivity likely made the situation worse.

4.2.5 Adverse Effects on other body systems

Air pollution has deleterious effects on several other organ systems including cardiovascular, endocrine, blood and overall health parameters like weight. Studies have shown increased risk of obesity linked with exposure to air pollution.⁴¹ Many studies have also demonstrated the association of air pollution with increased risk for insulin resistance and diabetes, high blood pressure, high cholesterol, stroke, and other cardiovascular and cardiometabolic diseases.⁴² An elevated level of anemia is seen in children exposed to elevated air pollution.⁴³

4.2.6 Adverse Psychological Effects

A review of 178 published articles systematically examined the psychological (affective, cognitive, behavioral), economic, and social effects of air pollution found: "Affectively, air pollution decreases happiness and life satisfaction, and increases annoyance, anxiety, mental disorders, self-harm, and suicide. Cognitively, it impairs cognitive functioning and decision making. Behaviorally, air pollution triggers avoidance behavior, defensive expenditure, and migration as coping strategies. Economically, it hurts work productivity and stock markets. Socially, it exacerbates criminal activities and worsens perception of the government. Importantly, both actual and perceived air pollution levels matter."⁴⁴

4.2.7 Adverse Economic Effect Secondary to Human Health Effects

These health risks would endanger two of our most valuable resources: our people and our future. Labor is essential to the economy. Through negative health effects, air pollution has been demonstrated to have a negative effect on labor supply, productivity and economic growth.⁴⁵ A 2012 study demonstrated a significant direct effect of air pollution on agricultural worker productivity; with a 10-ppb change leading to a 5.5 % drop in worker productivity.⁴⁶ The study found this conclusion could be applicable to all outdoor workers. Because of our agricultural,

equine, and tourism industries, Jefferson County has a huge outdoor workforce. Effect of labor supply and productivity are not limited to outdoor workers and or physical labor.⁴⁷ As children struggle during their education with attendance, attention, and socialistic ability due to the effects of air pollution on their health, their achievement suffers. As achievement suffers they are less able to achieve the training needed to achieve a good, well-paying job. Their lifetime earnings and overall wealth will suffer. They will consequently own less property and pay less taxes of all types. The effects of air pollution on human health will lead to decreased economic activity and government income, thereby depressed the local economy. Environmental protection should be seen as an investment in economic growth through advancement of quality labor availability capability and increased productivity.

4.2.8 Inappropriate to rely on the NAAQS alone to protect communities

The City of Ranson cannot simply rely on the EPA regulations to keep children and families in nearby schools and communities safe from the effects of air pollution. In fact, in 2019 the Independent Particulate Matter Review Panel (formerly U.S. EPA Clean Air Scientific Advisory Committee Particulate Matter Review Panel) on EPA's Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter stated that the committee unanimously and unequivocally found that the current primary annual and 24-hour PM_{2.5} National Ambient Air Quality Standards (NAAQS) were not adequate to protect public health. The advice from this 20-member committee, whose scientific disciplines include epidemiology, medicine, toxicology, air quality measurement, air quality modeling, exposure assessment measurement and modeling, risk assessment, statistics, and others, was ignored due presumably to political pressure. Not only are the NAAQS too high in some cases but due to the measure and mechanism by which they work they cannot replace the safety provided by good land use and zoning regulations, that are intended to do things like keep factories with air emissions and hundreds of heavy trucks away from elementary schools. In fact, there is a state law that prohibits siting a school near a factory. Unfortunately, the reciprocal law does not exist. Clearly just like with the water resources we cannot rely on the DEP or the EPA to do the job of what appropriate zoning should do. The whole point of zoning is to keep people safe and provide for their health and welfare. Ordinance #2017-302 puts families and school children directly in harm's way.

An editorial in the *New England Journal of Medicine*, commenting on several recent studies, stated: "The best control strategy from the standpoint of human health, supported by the scientific evidence to date, is to reduce the levels of all types of air pollutants. Our children's health depends on it."⁴⁸ The *Lancet* Commission on Pollution and Health citing many sources⁴⁹ found that prevention of non-communicable diseases will require pollution prevention and that this will require fundamental changes in societal patterns of production, consumption, and transportation. This will require a paradigm shift to a more sustainable economic model based on recognition of human rights, especially the right of children to health and well-being.⁵⁰ This is a major unexploited opportunity in in society that many communities are grappling with undertaking. This rezoning would represent a major step in the wrong direction in this respect. There is substantial and overwhelming evidence that this zoning change would violate the Land Use Objective number 10 of the 2012 comprehensive plan of Ranson by adversely affecting the health of the community.

4.3 Adversely affect the welfare of the community

Tourism, agriculture, and the equine industry are the largest industries in Jefferson County and have all played an important role in our economy for hundreds of years.

Jefferson County has always recognized and supported these key industries and, as a result, we have always had what the remainder of the country is now striving to achieve: a local economy based on productive, sustainable business. Across the country, considerable effort is now being expended to promote and support these types of industries, as their exponential benefit to the local and regional economies is only now being fully realized. Heavy industry in the heart of Jefferson county will have detrimental effects on these traditional, sustainable industries. It simply does not make sense to allow the degradation of industries widely recognized to be foundational elements of an adaptable, enduring economy by inviting into Jefferson County the culprit of this degradation and a symbol of a bygone era: heavy industry.

Heavy industry as a goal for job creation is a solution of the past. We are more than 100 years beyond the days of J.P. Morgan, Carnegie, and Rockefeller. The acknowledgement of this shift is clearly expressed in Ranson's Comprehensive Plan which states, "the end of Ranson's traditional industrial period was signaled by the closure of AB&C Corporation, Dixie Narco and the Kidde Foundry (Badger Powhatan)." This statement demonstrates that heavy industry is no longer desired in Ranson. The current Comprehensive Plan prioritizes open space, local agriculture, and quality of life. The plan further outlines how industries like tourism, agriculture, and equine industries are essential to ongoing economic development in Ranson. Heavy industry has numerous negative effects on these industries and it is incompatible with the goals we are striving towards. Heavy industry should not be provided for in Jefferson County zoning regulations.

The tourism, agriculture, and equine industries are synergistic. They support, protect, and promote one another in ways that create long-term stability and profitability in our local economy. Through pasture and crop land, the equine and agricultural industries enable profitable maintenance of the bucolic landscape that draws tourists to Jefferson County. The equine industry provides evening entertainment for tourists while the agriculture industry provides local products increasingly sought after by tourists. The tourism industry, in turn, provides customers and markets to both the equine and agricultural industries. But it is so much more than that. There are countless examples of deep interdependences and symbioses. The equine industry brings outside money into our economy in the form of out-of-state owners and breeders, creating jobs for Jefferson County's equine industry. The attractive nature of the county, as well as the quality and accessibility of accommodations, makes Jefferson County an even more desirable location for out-of-state equine investors. In many ways like this, the equine, agricultural, and tourism industries work hand in glove to bring money into our states, create jobs, and grow our local economy.

The tourism, agriculture, and equine industries are large conglomerates of small businesses. This structure provides a multitude of economic benefits over an economy based on a small number of large businesses, as is commonly the case in heavy industry. Professor of Agricultural and Regional Economics at Penn State and Director of the Northeast Regional Center for Rural

Development, Dr. Stephan Goetz, was quoted in a recent article⁵¹ saying, “Small, locally owned businesses and startups tend to generate higher incomes for people in a community than big, non-local firms, which can actually depress local economies.” Small businesses create jobs, cultivate innovation, and provide opportunities for individuals that would otherwise not exist, while large businesses’ concentration on efficiency and increasing profitability decreases job count and stifles innovation and individuality. Goetz went on to say “We can't look outside of the community for our economic salvation. The best strategy is to help people start new businesses and firms locally and help them grow and be successful.” This concept was supported by a recent WVU study⁵² on the economic outlook for the Eastern Panhandle in which they found that Jefferson County’s per capita income was \$8,800 per year above that of Berkeley county. This difference was attributed in part to Berkeley County’s job growth over the last several years coming from large companies such as P&G and Macy’s, whereas Jefferson County’s came from commuters and local small business. These local agriculture, tourism, and equine industries set our community apart. They support small businesses and startups and, in doing so, encourage the growth of better-paying jobs that are so valuable to our local economy.

Local economies that welcome and support small businesses are flexible and agile in times of crisis.⁵³ Small businesses have been shown to be capable of reacting to severe, sudden changes like medical epidemics. Recent events have shown us just how important that is. On the other hand, turbulence and uncertainty have been shown to be the leading causes for failure in manufacturing businesses such as heavy industry.⁵⁴ In these businesses, a concentration on efficiency and lean operations has led to an inability to adapt to change.^{55 56} Agility and flexibility are as important now as they have ever been. Heavy industry will introduce rigidity and threaten the small businesses that provide agility and flexibility to our economy.

Local food production provides a safety net in times of food instability. Recent events have revealed how the drive for lean efficiency and profitability in our food supply chains has left communities vulnerable to food shortages. The current situation highlights the value of the local, sustainable food production that we are fortunate to already enjoy here in Jefferson County as a result of our local agriculture industry. As mentioned above, the equine and tourism industries support the maintenance of the agricultural land needed for this food production. As a community, we should always be moving toward resiliency and agility in our economy and food supply not away from it.

Large companies involved in heavy industry not only hurt our economy directly but also harm industries that have been pillars of our economy for hundreds of years. Check out how heavy industry in this area of Jefferson County will damage each of these industries in the other fact sheets of this series.

4.3.1 Adverse Effects on Tourism

Tourism is critically important to Jefferson County’s economy. Much of the success of Jefferson County’s tourism industry can be credited to the bucolic scenery of farm land and pastures, natural resources, rich history, the thoroughbred industry and the race track and casino. These key elements support and enable other aspects of our tourism industry like agro-tourism, farmer’s markets, and scenic hiking trails. Rezoning at the site in Ranson will allow for the type

of industry that negatively impacts these elements that encourage tourism in Jefferson County. The resulting harm to our tourist industry will surely drive away visitors and decrease personal state, county, and local revenue.

According to a 2019 study⁵⁷ by the West Virginia Tourism Office, Jefferson County generated more tourism-derived revenue for state and local governments than any other county in West Virginia in the last 10 years. State and local government revenue from sales tax, fuel tax, hotel tax, and other travel-related spending averaged over \$178 million per year in the preceding decade, totaling almost \$1.8 billion. Over the last 10 years, no other county in West Virginia generated even half of this level of revenue from tourism. West Virginia businesses and our local economies also benefit from tourist spending. In 2018, tourism generated \$213.7 million in individual earnings and \$842.6 million in direct spending in Jefferson County.

It is important to note that most of the money generated by tourism in Jefferson County comes from neighboring states. The tourism industry is not simply recycling local dollars but actively bringing in money from biotech economy of Maryland, hi-tech economy of northern Virginia, and political economy of DC and use it to power our own and that of our state. The powerful draw of our local tourism industry allows Jefferson County to harness the success of neighboring areas and direct it back into our own local economy.

One of the important drivers for tourism in Jefferson County is the Appalachian Trail. According to the Appalachian Trail Conservancy, Harpers Ferry is the psychological midpoint of the Trail. Hikers often plan extended stays in Jefferson County, which creates an obvious positive for our tourism industry. Open vistas and human impact on the environment were found to be among the elements most often perceived and listed as having an effect on the visitor's experience on the Appalachian Trail.⁵⁸ A study by Kaplan found that points of interests and views drew visitors' attention and had a significant impact on their perception of the trail.⁵⁹ It was also found that particularly beautiful vistas helped visitors overlook elements that usually have a negative effect on trail experience like increased trail traffic. Another study published in *Leisure Sciences* revealed that scenic value was a perceptual theme of Appalachian Trail visitors, and that things as simple as dead trees visible in a vista can have a negative impact on visitors' overall perception.⁶⁰ The introduction of industrial activity made possible by the proposed rezoning in Ranson would have a negative effect on the scenic views of unspoiled landscape from the Appalachian Trail in Jefferson County. For example, the smokestacks and associated lights at the Rockwool plant in Ranson will be visible from 15 vistas on the Appalachian Trail (Appalachian Trail conservancy), 3 of the 5 main entrances into the county, and both of the main driving routes used by tourists. Multiple studies show that the perception of pollution is correlated with stress, annoyance, and symptoms of depression.^{61 62} The presence of large industrial installations in Jefferson County's viewshed will diminish the appeal our natural landscape has to Appalachian Trail tourists and any other potential visitors driving through our county.

Perceived air quality is another feature that attracts tourists to Jefferson County. Air pollution associated with smokestacks will therefore have a negative effect on tourists' desire to visit Jefferson County. Fine mode (0.1-2.5um) particles are associated with air pollution caused by the burning of fossil fuels and gas-to-particle conversion of pollutants such as sulfur dioxide, nitrogen oxides, and volatile organic compounds. These particles remain in the atmosphere for

days to weeks and alter the appearance of the atmosphere by scattering and absorbing solar radiation. The ultimate outcome of this type of air pollution is regional haze.⁶³ The effect of regional haze on tourists was explored in a review article published in the *Atmospheric Environment* titled “Impaired visibility: the air pollution people see.” A key takeaway on the negative affect of haze on vacationing tourists was summarized as follows:

“Vacations offer an escape from the routine and stress of our daily lives. Vacation destinations are often chosen based on their scenery; vacations are spent gazing at monuments, mountains, clouds, and oceans. Good visibility allows clear observation of distant features and appreciation of the inherent beauty of these scenes...Air pollution, which is often present in both our cities and parks, interferes with these attributes and can ruin the views vacationers travel to enjoy.”

People seek bucolic, unspoiled areas to escape the stresses of urban areas. Perceived pollution in urban areas causes stress while viewing natural scenes has both psychological and physiological benefits.⁷⁶⁴ The combination of smokestacks and haze will mar the viewshed in Jefferson County which will not only reduce the positive effects of a scenic landscape but also leave tourists disappointed and dissatisfied with their choice of destination.⁶⁵

Allowing the zoning change at the site in Ranson also risks Jefferson County’s reputation of having environmental-friendly, sustainable industry. Empirical studies show that qualities associated with sustainability have a positive impact on the competitiveness of a tourism destination. In fact, sustainability factors are often one of the most influential factors for determining competitiveness for tourist destinations.⁶⁶ The sight of smokestacks disgorging particulate matter into a hazy landscape is unlikely to evoke thoughts of sustainability in visitors driving into the county or gazing out from the Appalachian Trail. This type of industrial activity is at odds with the pastoral image cultivated by our local farmland, farmers’ markets, and fruit and vegetable stands.

There are certain factors that have been shown to be associated with successful development of rural tourism.⁶⁷ These factors include having a complete tourism package, good leadership, and support and participation from local government. Focus group participants from successful communities have noted that zoning and other local activities were most important to making communities attractive to tourists. In less successful communities, a lack of appropriate zoning and cooperation between local governments, led to eyesores and unattractive environments. Focus group participants from successful communities also cited good leadership, in the form of people who understood the importance of tourism, as crucial to the success of tourism. The support and participation of local government was also found to be important to the success of tourism in these communities. The most important factors were described to be zoning and maintenance of the community

By rezoning this area of the county, Ranson is demonstrating that it does not have an understanding or concern for the detrimental effect this action would have on tourism in surrounding municipalities. This lack of communication and cooperation with neighboring areas is unfortunately the type of behavior associated with communities that have less success in developing and maintaining local tourism industries. Ranson needs to understand that the actions

it takes here will affect tourism in every municipality throughout the county. Rezoning would allow the type of industry that would dramatically reduce Jefferson County's appeal to visitors and have a negative impact on the success of our local tourism industry. The only way to realize the full potential of Jefferson County's tourism industry is for local governments to work together to make coordinated and sustainable decisions about zoning.

4.3.2 Adverse Effects on Equine Industry

Ranson's proposed zoning change presents a significant risk to the equine industry in Jefferson County. The type of industry that would be allowed by the proposed zoning change in this location would jeopardizes horse health and threaten the long-term viability of the equine industry in the county.

The site of the proposed rezoning is less than six miles from Charles Town Races, a thoroughbred track with a year-round meet. There are also several breeding, training, and rehabilitation farms and facilities within the six-mile radius of the site in Ranson. Industrial activity typically emits a multitude of hazardous air pollutants capable of dispersing to sites several miles away, even when plants comply with permitted limits. It is therefore likely that pollutants from industrial activity at the proposed site in Ranson will have the potential to affect horses stabled several miles away.

Horses appear to be more sensitive to inhaled particulate matter than humans. According to a recent study published in the *Journal of Veterinary Internal Medicine*⁶⁸, horses are 15 times more sensitive to inhaled particulate matter than humans. Inhaled particulate matter can cause inflammation in horses that negatively affects performance even at subclinical levels i.e. levels undetectable without advanced diagnostics. Inhaled particulate matter is also a known contributor to the development of inflammatory airway disease (IAD)⁶⁹. IAD is a chronic airway disease that can affect horses long after their racing career is over. According to the West Virginia Department of Environmental Protections (WVDEP) air permit, the Rockwool plant in Ranson is permitted to emit 250.87 tons of particulate matter per year into the air⁷⁰.

While there is little research on how specific air pollutants affect horses, there are several observations that can be made on the effects of pollution on humans to infer potential impact on horses. Horses exposure times to pollutants are much longer when compared to typical human models because horses live outside. Horses that are housed near the site in Ranson and worked in this area year-round will also be continually exposed to air pollution. Additionally, horses must perform at maximal intensity exercise while typical models looking at human sensitivity to pollution are not done at maximal exercise. These comparisons suggest that horses will likely experience detrimental effects at lower levels of air pollution than humans.

The primary concern about air pollution is that increased levels of pollutants will increase inflammation in horses' lungs. Even small, subclinical amounts of inflammation in the lungs of horses negatively affect performance⁷¹. This inflammation can also cause increased recovery times following racing⁷². Reduced performance and training interruptions can lead to higher risk of injury, reduced winning average, fewer yearly starts, lower yearly earnings, shortened career length, fewer lifetime starts, reduced lifetime earnings, and reduced quality of life⁷³. Each of

these situations will lead to decreased return on investment, decreased cash flow, and decreased overall earnings for owners, trainers, and breeders with horses at Charles Town Races and in nearby areas.

While racing is usually a thoroughbred's first career, it is rarely their last. Some racing horses go on to be breeding stock, while others will have successful careers as sport horses. However, if they are unsound from injury or respiratory disease, they can be difficult to manage as breeding stock or unfit for a career as a sport horse. This affects the horse's quality of life and also places a burden on the industry by reducing the lifetime productivity of each horse.

Another concern related to the proposed rezoning in Ranson is the risk of groundwater contamination as a result of industrial activity. If local groundwater becomes contaminated, owners will not know until their animals are sick. Symptoms are likely to be non-specific and insidious in onset, and the underlying cause may be difficult to determine without extensive veterinary intervention. It may even become necessary for horsemen to periodically test water sources to determine if they are contaminated. All of this adds expense and uncertainty to an industry that already deals with large inherent risks.

The actual occurrence of groundwater contamination would be devastating for Jefferson County's equine industry. Breeding, raising, training, and even maintaining horses would be absolutely cost prohibitive on utility-provided water. For both geographic and financial reasons, it is simply impossible to think that the industry could use public or private utility-provided water if industrial activity fouled the local groundwater.

The equine industry in Jefferson County is hundreds of years old. It is not worth risking this historic and economically valuable industry by rezoning for industrial companies like Rockwool. An economic impact study of the Charles Town Thoroughbred Horse Racing Industry on Jefferson County's economy found that the spending by owners, breeders, and trainers of the equine industry directly contributes \$79.4 million to the county each year. Out-of-state owners, breeders, and trainers spend more than \$50 million in Jefferson County every year. The value of total business volume in Jefferson County is \$191 million each year⁷⁴. These numbers do not include the effect of the handle (betting) or the casino which totals over \$63 million per year. Rockwool promises it will provide 120 jobs (WVEDA bond agreement of May 2019).

The equine industry offers so many benefits that the industry in the rezoned area would not. For example, the equine industry supports local agriculture by providing a market for agricultural goods such as straw. The robust straw market supported by owners, trainers, and breeders allows for a third cash crop to be produced from one field in a year. This symbiotic relationship is an example of how local consumption of locally produced agricultural products has multiplicative benefits to the local economy⁷⁵. Through pastureland and support of local agricultural goods, the equine industry protects and preserves the open spaces that give our county its bucolic quality and help attract tourists. Through the breeders' incentive programs, the equine industry offers unique opportunities to draft state funds back to Jefferson County. Through the handle, its support of local agriculture, its stewardship of pastureland, and its enabling of spending by owners, breeders, trainers, the equine industry brings in tens of millions of dollars from outside the state into Jefferson County each year.

The equine industry provides jobs for a broad cross-section of the public. This industry offers individuals of any educational background a variety of paths to achieve a good middle-income living. Many jobs allow individuals to pursue apprenticeships or on-the-job training rather than requiring a costly college education. This flexibility allows for greater lifetime earnings and improved educational debt-to-earnings ratio for these workers. The equine industry's support of on-the-job education is yet another example of how Jefferson County has already embraced practices only now being recognized and promoted in the rest of the country. The equine industry also provides opportunities for non-traditional workers by offering job opportunities to those who may not be employable by larger corporations. This industry provides a variety of fulltime, part-time, flexible, and pick-up work. Encouraging this type of flexible job ecosystem helps create a healthy economy with broad participation in employment and consumption.

Rezoning this area of Jefferson County for Special District Industrial will allow in entities whose activities are harmful to our equine industry. The losses incurred by the equine industry would far outweigh any benefits derived from industries occupying the rezoned area. Sacrificing the long-term viability of one of our oldest and most productive industries for a net loss in business volume and economic value just does not make good sense for the Jefferson County economy.

4.3.3 Adverse Effects on Agriculture

Agriculture has been part of our economy and way of life in the Shenandoah region of the Great Valley for over 270 years. This industry has continued as a robust part of our economy since those days. At one point being known as the breadbasket of early America, what is now Jefferson County has excellent fertile soil. The early settlers followed the Great Valley down from New Jersey and Pennsylvania to the Shenandoah Valley for precisely this reason.

Unlike the bygone era of heavy industry, local agriculture and local consumption of agricultural goods are a boon to our local economy. According to the 2012 agricultural economy report, West Virginia had over \$806 million in agricultural sales. Jefferson County is among the top 10 counties in the state, for sales in every major commodity group. There were \$668 million in sales from animals and animal products in West Virginia, and Jefferson County was in the top 9 counties for animal and animal product sales. Field crops represented \$106 million in sales in the state and Jefferson County was the second highest producing county with more than \$10 million in sales. Jefferson County is the third highest county for vegetables and fruit sales with over 1.9 million in sales of the states 32 million in sales (Figure 8)⁷⁶.

Agriculture supports other local industries well beyond just supplying customers in the form of their employees. Agriculture supports tourism through agro-tourism, supports the bucolic nature of our county by preserving beautiful open spaces, and provides the locally produced agriculture goods many tourists are looking for in our markets and restaurants. Agriculture helps maintain the way of life many of the commuters who choose to live in Jefferson County enjoy. Agriculture supports the equine industry in a multitude of ways by providing local products like hay and straw, helping maintain pasture land, co-supporting local dual purpose retail stores, and helping recycle by products. Heavy industry could never achieve these things.

The industry that this zoning change in Ranson will provide for in this location has the potential to devastate the agricultural industry in our county. First, the air pollution associated with heavy industry causes decreased yields of both quantity and quality for several of the crops important to Jefferson County including winter wheat and soybeans⁷⁷. As yields decline for locally consumed crops like straw (from winter wheat) used in the equine industry, prices rise hurting both the producer and the consumer. Far more devastating is the possibility of ground water contamination. As explained in a separate fact sheet in this series, the hydrogeology in this location causes a very high level of groundwater aquifer vulnerability. Because of the large amount of pollution that heavy industry produces, the combination of these two factors makes the likelihood of groundwater contamination in this location very high. Agriculture in Jefferson County depends on groundwater. Without high quality groundwater, the management of livestock would be absolutely cost prohibitive in Jefferson County.

From the hardships of decreased yield to the devastation of ground water contamination, the industry that this zoning change in Ranson will provide for will negatively affect the agriculture industry in Jefferson County. Agriculture is a historic industry in Jefferson County that plays an important part in our economy and society that could not be replaced by heavy industry.

4.4 Adversely affect the safety of the community and region

This zoning change would adversely affect the water resources for a majority, including major industries, and municipalities. It would also endanger the water resources of northern Virginia and Maryland.

As described above in a dye test, the USGS found that the water from just adjacent to this site emerged in the headwaters of both the Elk's Run, Rattlesnake Run and one of the 6 springs that feeds the Town Run in Shepherdstown.⁷⁸ (Figures 5 and 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figures 5 and 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figures 5 and 6). The Town Run runs right through the middle of town where children play and learn to fish. The headwaters of Rattlesnake Run are a spring about 3.5 miles from the site and is also a tributary of the Potomac River. These are just three of the examples the dye test demonstrated of how the groundwater at the site communicates with and affects the surface waters in the county. This site is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams.

A great majority of people in Jefferson County rely on ground water for their water needs. Most of these people rely on personal well water. Our equine and agriculture industries also rely on groundwater. The Potomac River provides water to many communities downstream including a million gallons a day for Frederick and 40 million gallons a day to Loudoun. The combination of the effects on ground and surface water will endanger the drinking water for tens to hundreds of thousands of people. This is a huge safety concern and means that this zoning change would undoubtedly adversely affect the community.

5.0 Community Engagement

In several locations throughout the Comprehensive Plan public engagement is mentioned. An example is on page 33 under Community Design Objectives and states: “Engage the whole community in planning constructively. While the needs of particular stakeholders and neighboring property owners must be considered, projects should be planned with the wider community in mind.” This was clearly not achieved in the process. The neighboring property owners were not included in this process and had no idea the nature of the entity being zoned for in this location.

6.0 Environmental Discrimination and Human Rights

The area surrounding the location, of the proposed zoning change that, is historically lower income and underserved. Deciding to locate a tract of such zoning in this location when is it on the whole unwanted and totally inappropriate for the land and surroundings is an example of environmental injustice. The Lancet Commission on Pollution and Health, citing the United Nation’s Universal Declaration of 1948 on Human Rights, found that “pollution threatens fundamental human rights - the right to life, the right to health, the right to well-being, and the rights of the child.” This rezoning represents not only a bygone era of economic development but also a bygone era of environmental injustice and human rights violation.

The Lancet Commission on Pollution and Health further found that prevention of non-communicable diseases will require pollution prevention and that this will require fundamental changes in societal patterns of production, consumption, and transportation. This will require a paradigm shift to a more sustainable economic model based on recognition of human rights. They also found this is a major unexploited opportunity in society that many communities are grappling with undertaking. The movement away from the smart code zoning, with it integrated walkable communities, to large tracts of land dedicated to polluting industry close to a title one school is the exact opposite of this. This rezoning would represent a major step in the wrong direction for disease prevention, human rights, Ranson, and Jefferson County!

7.0 Conclusion

This zoning change will violate the intention of the comprehensive plan of Ranson to provide ample affordable housing in complete communities that will allow residents to live, work, and shop in the same community. Instead, it will promote replacing them with a single-use area that would be a separate pod of land use. This zoning change will also allow land to be used for industry that it is totally inappropriate and ill-suited to, endangering the water resources and water safety. Through its air emissions, effects on local industry, and water quality the industry this zoning will provide for will adversely affect the health, safety and welfare of the community. This zoning change adds no additional advantage to the residents of Ranson and violates the comprehensive plan in several key areas working in contrast to the goals, objectives and actions of the comprehensive plan. This will result in consequences that were intended to be prevented by the comprehensive plan. Please vote NO zoning ordinance #2017-302.

Sincerely,

Christine L Wimer

Christine Wimer
President
Jefferson County Foundation, Inc.

¹ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

² Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4

³ CSN Technical Bulletin no. 1, *Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed*, version 2.0, 2009

⁴ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area*, US GEOLOGICAL SURVEY, 1991

Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.

Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. *Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia*. *Field Guides*. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).

- ⁵ Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. *Earth-Science Reviews*. 2014 Nov 1;138:61-88.
- Ford D, Williams PD. *Karst hydrogeology and geomorphology*. John Wiley & Sons; 2013 May 3.
- Zhou W, Beck BF. Engineering issues on karst. In *Karst management 2011* (pp. 9-45). Springer, Dordrecht.
- ⁶ Carpenter DL, Connelly DT, M Innis. Project Shuttle, Site Characterization Report VRP (Volunteer Remediation Plan) Parcel Jefferson Orchards Site. *Environmental Resources Management*. 2017 Sept.
- ⁷ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area, US GEOLOGICAL SURVEY*, 1991
- ⁸ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.
- ⁹ Doerflinger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). *Environmental Geology*. 1999 Dec 1;39(2):165-76.
- ¹⁰ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.
- Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. *Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. Field Guides*. 2015 Sep 1;40:425-84.
- Doctor DII, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).
- ¹¹ Project Shuttle -New Industrial Site at the former Jefferson Orchard Kearneysville, Jefferson County, West Virginia Specialized Engineering Project No. 177164, Specialized Engineering 4845 International Blvd, Suite 104 Frederick, MD 21703, July 11, 2017
- ¹² CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009
- ¹³ Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4
- ¹⁴ Kyle AD, Wright CC, Caldwell JC, Buffler PA, Woodruff TJ. Evaluating the health significance of hazardous air pollutants using monitoring data. *Public health reports*. 2001;116(1):32-44.
- ¹⁵ Health Effects Institute (HEI) and Institute for Health Metrics and Evaluation (IHME), d. *State of global air – 2018*. Available at: <https://www.stateofglobalair.org>.
- ¹⁶ Landrigan PJ, Fuller R, Fisher S, Suk WA, Sly P, Chiles TC, Bose-O'Reilly S. Pollution and children's health. *Science of The Total Environment*. 2019 Feb 10;650:2389-94.
- World Health Organization (WHO), 2018. *Inheriting a Sustainable World? Atlas on Children's Health and the Environment*. WHO, Geneva Available at: <http://www.who.int/ceh/publications/inheriting-a-sustainable-world/en/>
- Barker, D.J., 2004. The developmental origins of adult disease. *J. Am. Coll. Nutr.* 23 (588S– 95S).
- ¹⁷ Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., N, Basu, et al., 2017. The Lancet Commission on pollution and health. *Lancet* [https://doi.org/10.1016/S0140-6736\(17\)32345-0](https://doi.org/10.1016/S0140-6736(17)32345-0).
- ¹⁸ National Academy of Sciences, 1993. *Pesticides in the Diets of Infants and Children*. National Academies Press, Washington, DC.
- ¹⁹ Leibel S, Post M. Endogenous and exogenous stem/progenitor cells in the lung and their role in the pathogenesis and treatment of pediatric lung disease. *Front Pediatr* 2016;4:36.
- ²⁰ Boda E, Rigamonti AE, Bollati V. Understanding the effects of air pollution on neurogenesis and gliogenesis in the growing and adult brain. *Current Opinion in Pharmacology*. 2020 Feb 1;50:61-6.
- ²¹ Korten I, Ramsey K, Latzin P. Air pollution during pregnancy and lung development in the child. *Paediatric respiratory reviews*. 2017 Jan 1;21:38-46.
- ²² Kajekar R. Environmental factors and developmental outcomes in the lung. *Pharmacol Ther* 2007;114(2):129–45.
- ²³ LiY-F, LangholzB, SalamMT, GillilandFD. Maternal and grandmaternal smoking patterns are associated with early childhood asthma. *Chest* 2005;127(4): 1232–41.

²⁴ Boda E, Rigamonti AE, Bollati V. Understanding the effects of air pollution on neurogenesis and gliogenesis in the growing and adult brain. *Current Opinion in Pharmacology*. 2020 Feb 1;50:61-6.

²⁵ Block, M. L., & Calderón-Garcidueñas, L. (2009). Air pollution: Mechanisms of neuroinflammation and CNS disease. *Trends in Neurosciences*, 32(9), 506–516.

²⁶ Calderón-Garcidueñas L, Leray E, Heydarpour P, Torres-Jardón R, Reis J. Air pollution, a rising environmental risk factor for cognition, neuroinflammation and neurodegeneration: the clinical impact on children and beyond. *Revue neurologique*. 2016 Jan 1;172(1):69-80.

Perera FP. Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change. *Environmental health perspectives*. 2017 Feb;125(2):141-8.

Woodruff TJ, Darrow LA, Parker JD. Air pollution and postneonatal infant mortality in the United States, 1999–2002. *Environmental Health Perspectives*. 2008 Jan;116(1):110-5.

Jacobs M, Zhang G, Chen S, Mullins B, Bell M, Jin L, Guo Y, Huxley R, Pereira G. The association between ambient air pollution and selected adverse pregnancy outcomes in China: a systematic review. *Science of The Total Environment*. 2017 Feb 1;579:1179-92.

²⁷ Lyall K, Schmidt RJ, Hertz-Picciotto I. Maternal lifestyle and environmental risk factors for autism spectrum disorders. *International journal of epidemiology*. 2014 Apr 1;43(2):443-64.

Rossignol DA, Genuis SJ, Frye RE. Environmental toxicants and autism spectrum disorders: a systematic review. *Translational psychiatry*. 2014 Feb;4(2):e360-.

Ornoy A, Weinstein-Fudim L, Ergaz Z. Prenatal factors associated with autism spectrum disorder (ASD). *Reproductive toxicology*. 2015 Aug 15;56:155-69.

²⁸ Shier V, Nicosia N, Shih R, Datar A. Ambient air pollution and children’s cognitive outcomes. *Population and Environment*. 2019 Mar 15;40(3):347-67.

²⁹ Ham JC, Zweig JS, Avol E. Pollution, test scores and distribution of academic achievement: Evidence from California schools 2002–2008. Available at econweb. umd. edu/~ ham/Pollution_all_accept_feb% 202014a. pdf. Accessed December. 2014;18:2016.

Miller, S. J., & Vela, M. A. (2013). The effects of air pollution on educational outcomes: Evidence from Chile. Inter-American Development Bank. IDB Working Paper Series No. IDB-WP-468.

³⁰ Currie J, Hanushek EA, Kahn EM, Neidell M, Rivkin SG. Does pollution increase school absences?. *The Review of Economics and Statistics*. 2009 Nov 1;91(4):682-94.

Gilliland FD, Berhane K, Rappaport EB, Thomas DC, Avol E, Gauderman WJ, London SJ, Margolis HG, McConnell R, Islam KT, Peters JM. The effects of ambient air pollution on school absenteeism due to respiratory illnesses. *Epidemiology*. 2001 Jan 1:43-54.

Mohai P, Kweon BS, Lee S, Ard K. Air pollution around schools is linked to poorer student health and academic performance. *Health Affairs*. 2011 May 1;30(5):852-62.

³¹ Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.

Martino D, Prescott S. Epigenetics and prenatal influences on asthma and allergic airways disease. *Chest*. 2011; 139:640–647.

Pinkerton KE, Joad JP. Influence of air pollution on respiratory health during perinatal development. *Clin Exp Pharmacol Physiol*. 2006; 33:269–272.

Gauderman WJ, Urman R, Avol E, et al. Association of improved air quality with lung development in children. *N Engl J Med*. 2015; 372:905–913.

³² Korten I, Ramsey K, Latzin P. Air pollution during pregnancy and lung development in the child. *Paediatric respiratory reviews*. 2017 Jan 1;21:38-46.

Gauderman WJ, Urman R, Avol E, et al. Association of improved air quality with lung development in children. *N Engl J Med*. 2015; 372:905–913.

³³ Carosino CM, Bein KJ, Plummer LE, et al. Allergic airway inflammation is differentially exacerbated by daytime and nighttime ultrafine and submicron fine ambient particles: heme oxygenase-1 as an indicator of PM-mediated allergic inflammation. *J Toxicol Environ Health A*. 2015; 78:254–266.

- Wiegman CH, Li F, Clarke CJ, et al. A comprehensive analysis of oxidative stress in the ozone-induced lung inflammation mouse model. *Clin Sci (Lond)*. 2014; 126:425–440.
- Li R, Kou X, Tian J, et al. Effect of sulfur dioxide on inflammatory and immune regulation in asthmatic rats. *Chemosphere*. 2014; 112:296–304.
- ³⁴ Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.
- Samoli E, Nastos PT, Paliatatos AG, Katsouyanni K, Priftis KN. Acute effects of air pollution on pediatric asthma exacerbation: evidence of association and effect modification. *Environmental research*. 2011 Apr 1;111(3):418-24.
- Shin SW, Bae DJ, Park CS, Lee JU, Kim RH, Kim SR, Chang HS, Park JS. Effects of air pollution on moderate and severe asthma exacerbations. *Journal of Asthma*. 2019 May 23:1-1.
- ³⁵ Schikowski T, Mills IC, Anderson HR, et al. Ambient air pollution: a cause of COPD? *Eur Respir J*. 2014; 43:250–263.
- Tsai SS, Chang CC, Yang CY. Fine particulate air pollution and hospital admissions for chronic obstructive pulmonary disease: a case-crossover study in Taipei. *International journal of environmental research and public health*. 2013; 10:6015–6026.
- ³⁶ Anderson DS, Patchin ES, Silva RM, et al. Influence of Particle Size on Persistence and Clearance of Aerosolized Silver Nanoparticles in the Rat Lung. *Toxicological Sciences*. 2015; 144:366–381.
- ³⁷ Yu XJ, Yang MJ, Zhou B, et al. Characterization of Somatic Mutations in Air Pollution-Related Lung Cancer. *EBioMedicine*. 2015; 2:583–590.
- Loomis D, Huang W, Chen G. The International Agency for Research on Cancer (IARC) evaluation of the carcinogenicity of outdoor air pollution: focus on China. *Chin J Cancer*. 2014; 33:189–196.
- Raaschou-Nielsen O, Andersen ZJ, Beelen R, et al. Air pollution and lung cancer incidence in 17 European cohorts: prospective analyses from the European Study of Cohorts for Air Pollution Effects (ESCAPE). *Lancet Oncol*. 2013; 14:813–822.
- Chen G, Wan X, Yang G, Zou X. Traffic-related air pollution and lung cancer: A meta-analysis. *Thorac Cancer*. 2015; 6:307–318. [PubMed: 26273377]
- Villeneuve PJ, Jerrett M, Brenner D, et al. A case-control study of long-term exposure to ambient volatile organic compounds and lung cancer in Toronto, Ontario, Canada. *Am J Epidemiol*. 2014; 179:443–451.
- Cesaroni G, Badaloni C, Gariazzo C, et al. Long-term exposure to urban air pollution and mortality in a cohort of more than a million adults in Rome. *Environ Health Perspect*. 2013; 121:324–331.
- Jerrett M, Burnett RT, Beckerman BS, et al. Spatial analysis of air pollution and mortality in California. *Am J Respir Crit Care Med*. 2013; 188:593–599.
- Hart JE, Spiegelman D, Beelen R, et al. Long-Term Ambient Residential Traffic-Related Exposures and Measurement Error-Adjusted Risk of Incident Lung Cancer in the Netherlands Cohort Study on Diet and Cancer. *Environ Health Perspect*. 2015; 123:860–866.
- Puett RC, Hart JE, Yanosky JD, et al. Particulate matter air pollution exposure, distance to road, and incident lung cancer in the nurses' health study cohort. *Environ Health Perspect*. 2014; 122:926–932.
- Hamra GB, Guha N, Cohen A, et al. Outdoor particulate matter exposure and lung cancer: a systematic review and meta-analysis. *Environ Health Perspect*. 2014; 122:906–911.
- Hystad P, Demers PA, Johnson KC, et al. Long-term residential exposure to air pollution and lung cancer risk. *Epidemiology*. 2013; 24:762–772.
- Tsoi CT, Tse LA. Professional drivers and lung cancer: a systematic review
- ³⁸ HEI Collaborative Working Group on Air Pollution P; Health in Ho Chi Minh C. Le TG, et al. Effects of short-term exposure to air pollution on hospital admissions of young children for acute lower respiratory infections in Ho Chi Minh City, Vietnam. *Res Rep Health Eff Inst*. 2012:5–72. discussion 73-83.
- Darrow LA, Klein M, Flanders WD, et al. Air pollution and acute respiratory infections among children 0-4 years of age: an 18-year time-series study. *Am J Epidemiol*. 2014; 180:968–977.
- Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.
- ³⁹ To T, Zhu J, Stieb D, Gray N, Fong I, Pinault L, Jerrett M, Robichaud A, Ménard R, van Donkelaar A, Martin RV. Early life exposure to air pollution and incidence of childhood asthma, allergic rhinitis and eczema. *European Respiratory Journal*. 2020 Feb 1;55(2).

⁴⁰ Estrella B, Naumova EN, Cepeda M, Voortman T, Katsikis PD, Drexhage HA. Effects of Air Pollution on Lung Innate Lymphoid Cells: Review of In Vitro and In Vivo Experimental Studies. *International journal of environmental research and public health*. 2019 Jan;16(13):2347.

⁴¹ Jerrett M, McConnell R, Wolch J, Chang R, Lam C, Dunton G, Gilliland F, Lurmann F, Islam T, Berhane K. Traffic-related air pollution and obesity formation in children: a longitudinal, multilevel analysis. *Environmental Health*. 2014 Dec 1;13(1):49.

McConnell R, Shen E, Gilliland FD, Jerrett M, Wolch J, Chang CC, Lurmann F, Berhane K. A longitudinal cohort study of body mass index and childhood exposure to secondhand tobacco smoke and air pollution: the Southern California Children's Health Study. *Environmental health perspectives*. 2015 Apr;123(4):360-6. Longitudinal associations of in utero and early life near-roadway air pollution with trajectories of childhood body mass index. Rundle A, Hoepner L, Hassoun A, Oberfield S, Freyer G, Holmes D, Reyes M, Quinn J, Camann D, Perera F, Whyatt R. Association of childhood obesity with maternal exposure to ambient air polycyclic aromatic hydrocarbons during pregnancy. *American journal of epidemiology*. 2012 Jun 1;175(11):1163-72.

⁴² Alderete TL, Habre R, Toledo-Corral CM, Berhane K, Chen Z, Lurmann FW, Weigensberg MJ, Goran MI, Gilliland FD. Longitudinal associations between ambient air pollution with insulin sensitivity, β -cell function, and adiposity in Los Angeles Latino children. *Diabetes*. 2017 Jul 1;66(7):1789-96.

Brook, R.D., Rajagopalan, S., Pope 3rd, C.A., et al., 2010. Particulate matter air pollution and cardiovascular disease: an update to the scientific statement from the American Heart Association. *Circulation* 121 (21), 2331–2378.

Qin XD, Qian Z, Vaughn MG, Trevathan E, Emo B, Paul G, Ren WH, Hao YT, Dong GH. Gender-specific differences of interaction between obesity and air pollution on stroke and cardiovascular diseases in Chinese adults from a high pollution range area: a large population based cross sectional study. *Science of the Total Environment*. 2015 Oct 1;529:243-8.

Brook RD, Sun Z, Brook JR, Zhao X, Ruan Y, Yan J, Mukherjee B, Rao X, Duan F, Sun L, Liang R. Extreme air pollution conditions adversely affect blood pressure and insulin resistance: the air pollution and cardiometabolic disease study. *Hypertension*. 2016 Jan;67(1):77-85.

Li J, Zhou C, Xu H, Brook RD, Liu S, Yi T, Wang Y, Feng B, Zhao M, Wang X, Zhao Q. Ambient air pollution is associated with HDL (high-density lipoprotein) dysfunction in healthy adults. *Arteriosclerosis, thrombosis, and vascular biology*. 2019 Mar;39(3):513-22.

⁴³ Nikolić M, Nikić D, Stanković A. Effects of air pollution on red blood cells in children. *Pol J Environ Stud*. 2008 Mar 1;17(28):267.

⁴⁴ Lu JG. Air pollution: a systematic review of its psychological, economic, and social effects. *Current opinion in psychology*. 2020 Apr 1;32:52-65.

⁴⁵ Graff Zivin J, Neidell M. The impact of pollution on worker productivity. *American Economic Review*. 2012 Dec;102(7):3652-73.

Chang T, Graff Zivin J, Gross T, Neidell M. Particulate pollution and the productivity of pear packers. *American Economic Journal: Economic Policy*. 2016 Aug;8(3):141-69.

Chang TY, Graff Zivin J, Gross T, Neidell M. The effect of pollution on worker productivity: evidence from call center workers in China. *American Economic Journal: Applied Economics*. 2019 Jan;11(1):151-72.

Hanna R, Oliva P. The effect of pollution on labor supply: Evidence from a natural experiment in Mexico City. *Journal of Public Economics*. 2015 Feb 1;122:68-79.

Bosi S, Desmarchelier D, Ragot L. Pollution effects on labor supply and growth. *International Journal of Economic Theory*. 2015 Dec;11(4):371-88.

Holub F, Hospido L, Wagner UJ. Air pollution and labor supply: Evidence from social security data.

⁴⁶ Graff Zivin J, Neidell M. The impact of pollution on worker productivity. *American Economic Review*. 2012 Dec;102(7):3652-73.

⁴⁷ Chang TY, Graff Zivin J, Gross T, Neidell M. The effect of pollution on worker productivity: evidence from call center workers in China. *American Economic Journal: Applied Economics*. 2019 Jan;11(1):151-72.

⁴⁸ Gauderman WJ. Air pollution and children--an unhealthy mix. *New England Journal of Medicine*. 2006 Jul 6;355(1):78-.

- ⁴⁹ Collins, T.J., Crews, D., DeFur, P.L., Dickerson, S.M., Edwards, T.M., Gore, A.C., Guillette, L.J., Hayes, T., Heindel, J.J., Moores, A., Patisaul, H.B., Tal, T.L., Thayer, K.A., Vandenberg, L.N., Warner, J.C., Watson, C.S., vom Saal, F.S., Zoeller, R.T., O'Brien, K.P., Myers, J.P., Schug, T.T., Abagyan, R., Blumberg, B., 2013. Designing endocrine disruption out of the next generation of chemicals. *Green Chem.* 15, 181–198. <https://doi.org/10.1039/c2gc35055f>.
- Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Souza Dias, B.F., Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G.M., Marten, R., Myers, S.S., Nishtar, S., Osofsky, S.A., Pattanayak, S.K., Pongsiri, M.J., Romanelli, C., Soucat, A., Vega, J., Yach, D., 2015 Nov 14. Safeguarding human health in the Anthropocene epoch: report of the Rockefeller Foundation-Lancet Commission on planetary health. *Lancet* 386 (10007), 1973–2028. [https://doi.org/10.1016/S0140-6736\(15\)60901-1](https://doi.org/10.1016/S0140-6736(15)60901-1) (Epub 2015 Jul 15).
- McMichael, A.J., 2017. *Climate Change and the Health of Nations: Famines, Fevers, and the Fate of Populations*. Oxford University Press, London.
- World Economic Forum, January, 2014. *Towards the Circular Economy: accelerating the scale-up across global supply chains*. http://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf.
- ⁵⁰ Landrigan PJ, Fuller R, Fisher S, Suk WA, Sly P, Chiles TC, Bose-O'Reilly S. Pollution and children's health. *Science of The Total Environment*. 2019 Feb 10;650:2389-94.

Matos EP, Reisen VA, Serpa FS, Prezotti Filho PR, Leite MD. Space-time analysis of the effect of air pollution on children's health. *Cadernos de saude publica*. 2019 Oct 7;35:e00145418.

⁵¹ Small Business is Good for Local Economies; Big Business is Not, Researchers Say, *Business News Daily*, 2020 Feb 26; <https://www.businessnewsdaily.com/1298-small-business-good-for-economy.html>

⁵² Lego B, Deskins J, *The Eastern Panhandle Economic Outlook 2020-2024*, Bureau of Business & Economic Research, West Virginia University, John Chambers College of Business & Economics, 2019.

⁵³ Irvine W, Anderson AR. Small tourist firms in rural areas: agility, vulnerability and survival in the face of crisis. *International journal of entrepreneurial behavior & research*. 2004 Aug 1.

⁵⁴ Small AW, Downey EA. Orchestrating multiple changes: a framework for managing concurrent changes of varied type and scope. In *IEEMC 96 Proceedings. International Conference on Engineering and Technology Management. Managing Virtual Enterprises: A Convergence of Communications, Computing, and Energy Technologies 1996 Aug 18 (pp. 627-634)*. IEEE.

⁵⁵ Verstraete C. Planning for the unexpected [business agility]. *Manufacturing Engineer*. 2004 Jun 1;83(3):18-21.

⁵⁶ Goodhue DL, Chen DQ, Boudreau MC, Cochran J. Addressing business agility challenges with enterprise systems. 2009.

⁵⁷ *West Virginia travel impacts 200-2018p*, prepared by Dean Runyan Associates, prepared for the West Virginia Tourism Office Charleston, West Virginia. 2019

⁵⁸ Taylor JG, Czarnowski KJ, Sexton NR, Flick S. The importance of water to Rocky Mountain National Park visitors: an adaptation of visitor-employed photography to natural resources management. *Journal of Applied Recreation Research*. 1995;20(1):61-85.

⁵⁹ Kaplan R, Kaplan S, Ryan R. *With people in mind: Design and management of everyday nature*. Island press; 1998.

⁶⁰ Dorwart CE, Moore RL, Leung YF. Visitors' perceptions of a trail environment and effects on experiences: A model for nature-based recreation experiences. *Leisure Sciences*. 2009 Dec 23;32(1):33-54.

⁶¹ Mace BL, Bell PA, Loomis RJ. Visibility and natural quiet in national parks and wilderness areas: Psychological considerations. *Environment and Behavior*. 2004 Jan;36(1):5-31.

⁶² Evans GW, Jacobs SV. Air pollution and human behavior. *Journal of Social Issues*. 1981 Jan;37(1):95-125.

⁶³ Chameides WL, Yu H, Liu SC, Bergin M, Zhou X, Mearns L, Wang G, Kiang CS, Saylor RD, Luo C, Huang Y. Case study of the effects of atmospheric aerosols and regional haze on agriculture: an opportunity to enhance crop yields in China through emission controls?. *Proceedings of the National Academy of Sciences*. 1999 Nov 23;96(24):13626-33.

⁶⁴ Velarde MD, Fry G, Tveit M. Health effects of viewing landscapes—Landscape types in environmental psychology. *Urban Forestry & Urban Greening*. 2007 Nov 15;6(4):199-212.

⁶⁵ Doyle M, Dorling S. Visibility trends in the UK 1950–1997. *Atmospheric Environment*. 2002 Jul 1;36(19):3161-72.

⁶⁶ Cucculelli M, Goffi G. Does sustainability enhance tourism destination competitiveness? Evidence from Italian Destinations of Excellence. *Journal of Cleaner Production*. 2016 Jan 16;111:370-82.

⁶⁷ Wilson S, Fesenmaier DR, Fesenmaier J, Van Es JC. Factors for success in rural tourism development. *Journal of Travel research*. 2001 Nov;40(2):132-8.

⁶⁸ Ivester KM, Couëtill LL, Moore GE. An observational study of environmental exposures, airway cytology, and performance in racing thoroughbreds. *Journal of veterinary internal medicine*. 2018 Sep;32(5):1754-62.

⁶⁹ Couëtill LL, Cardwell JM, Gerber V, Lavoie JP, Léguillette R, Richard EA. Inflammatory airway disease of horses—revised consensus statement. *Journal of veterinary internal medicine*. 2016 Mar;30(2):503-15.;

⁷⁰ https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/037-00108_IPR_R14-0037.pdf;

⁷¹ https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/037-00108_IPR_R14-0037.pdf;

Richard EA, Fortier GD, Pitel PH, Dupuis MC, Valette JP, Art T, Denoix JM, Lekeux PM, Van Erck E. Sub-clinical diseases affecting performance in Standardbred trotters: diagnostic methods and predictive parameters. *The Veterinary Journal*. 2010 Jun 1;184(3):282-9.;

Holcombe SJ, Robinson NE, Derksen FJ, Bertold B, Genovese R, Miller R, Rupp HD, Carr EA, Eberhart SW, Boruta D, Kaneene JB. Effect of tracheal mucus and tracheal cytology on racing performance in Thoroughbred racehorses. *Equine veterinary journal*. 2006 Jul 1;38(4):300-4.;

Sanchez A, Couetil LL, Ward MP, Clark SP. Effect of airway disease on blood gas exchange in racehorses. *Journal of veterinary internal medicine*. 2005 Jan;19(1):87-92.;

Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

⁷² Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

⁷³ Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

Hernandez J, Hawkins DL, Scollay MC. Race-start characteristics and risk of catastrophic musculoskeletal injury in Thoroughbred racehorses. *Journal of the American Veterinary Medical Association*. 2001 Jan 1;218(1):83-6.;

Auer JA, Stick JA. *Equine Surgery* 4th edn, Saunders, 2012.;

Hernandez J, Hawkins DL, Scollay MC. Race-start characteristics and risk of catastrophic musculoskeletal injury in Thoroughbred racehorses. *Journal of the American Veterinary Medical Association*. 2001 Jan 1;218(1):83-6.;

Auer JA, Stick JA. *Equine Surgery* 4th edn, Saunders, 2012.;

⁷⁴ Witt T, Meinert T. *The Economic Impact of the Charles Town Thoroughbred Horse Racing Industry on the Jefferson County a*. 2011

⁷⁵ Masi B. *The 25% shift: The benefits of food localization for Northeast Ohio and how to realize them*. Cleveland-Cuyahoga County Food Policy Coalition; 2010.

⁷⁶ A Shared Agenda For Growing West Virginia's Agricultural Economy, Prepared by Fourth Economy for West Virginia Department Of Agriculture West Virginia University Extension Service 2012.

⁷⁷ Fuhrer J. Ozone risk for crops and pastures in present and future climates. Naturwissenschaften. 2009 Feb 1;96(2):173-94.

Ainsworth EA, Yendrek CR, Sitch S, Collins WJ, Emberson LD. The effects of tropospheric ozone on net primary productivity and implications for climate change. Annual review of plant biology. 2012 Jun 2;63:637-61.

Tariq M, Ali M, Shah ZJ. Characteristics of industrial effluents and their possible impacts on quality of underground water. Soil Environ. 2006 Jan 1;25(1):64-9.

Chauhan A, Joshi PC. Effect of ambient air pollutants on wheat and mustard crops growing in the vicinity of urban and industrial areas. New York Science Journal. 2010;3(2):52-60.

⁷⁸ Kozar MD, Hobba WA, Macy JA, Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area, US GEOLOGICAL SURVEY, 1991

Figure 1:

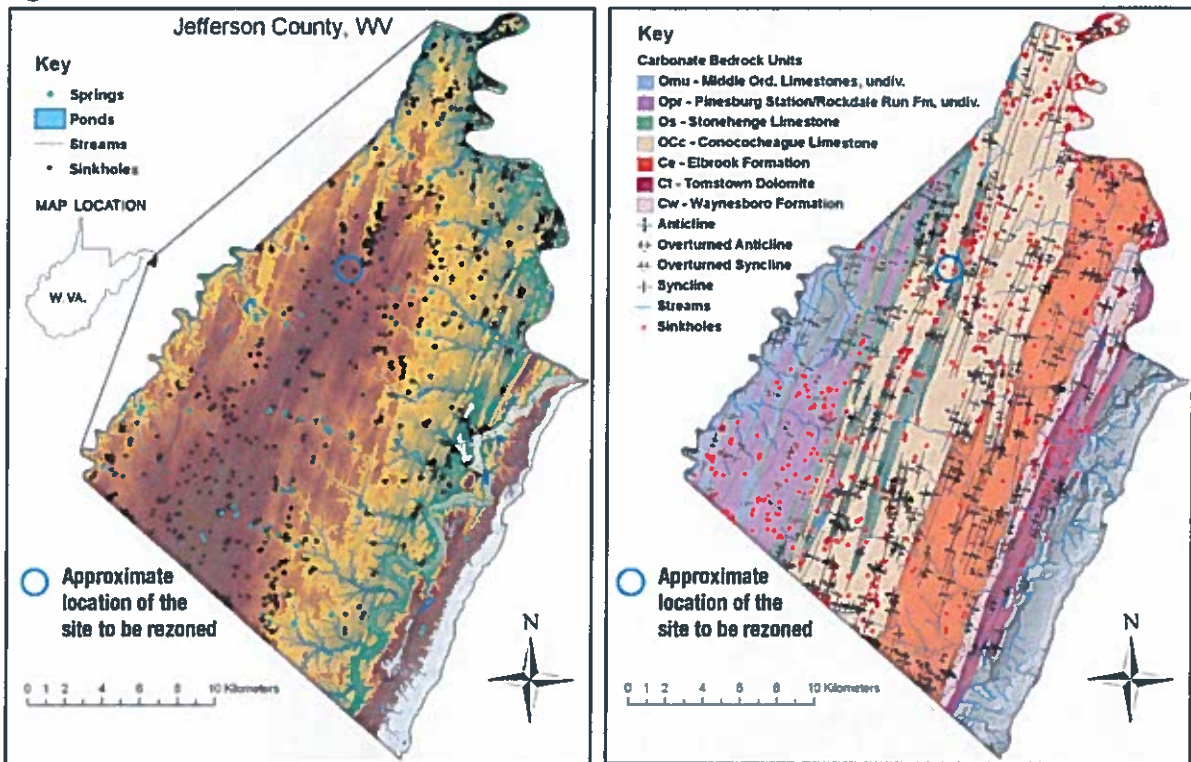
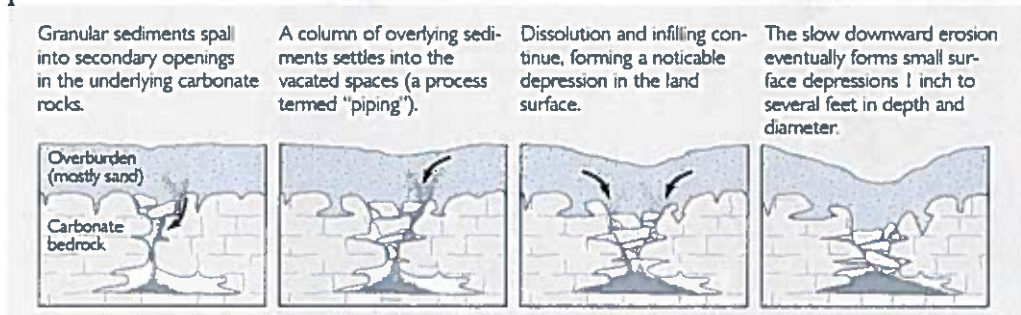


Figure 2:

Cover-subsidence sinkholes tend to develop gradually where the covering sediments are permeable and contain sand.



In areas where cover material is thicker or sediments contain more clay, cover-subsidence sinkholes are relatively uncommon, are smaller, and may go undetected for long periods.

Cover-collapse sinkholes

may develop abruptly (over a period of hours) and cause catastrophic damages. They occur where the covering sediments contain a significant amount of clay.

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

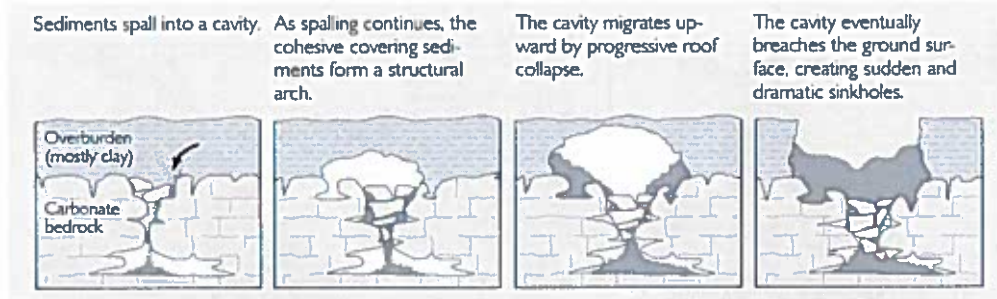


Figure 3:

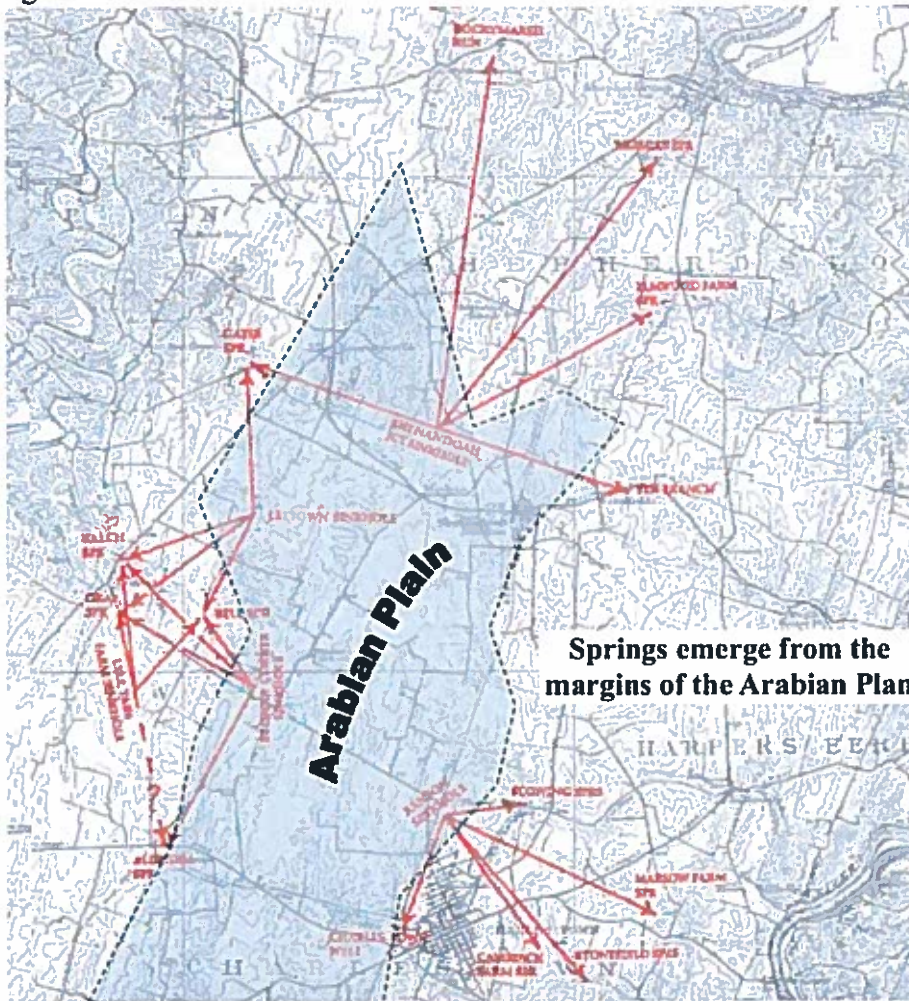


Figure 4:

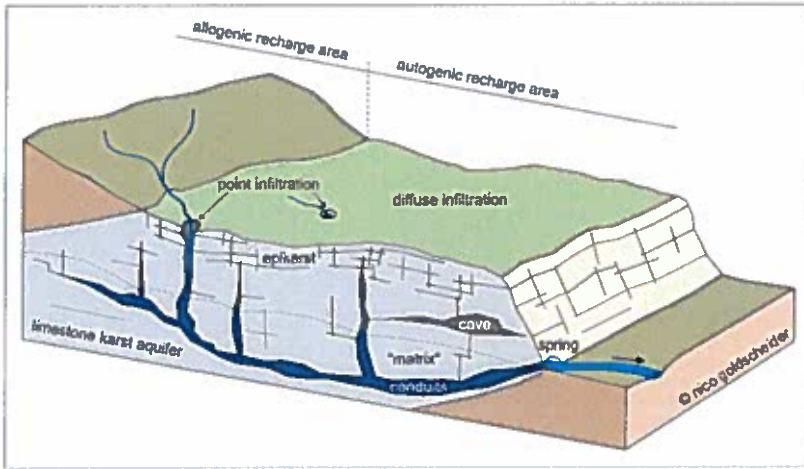


Figure 5:

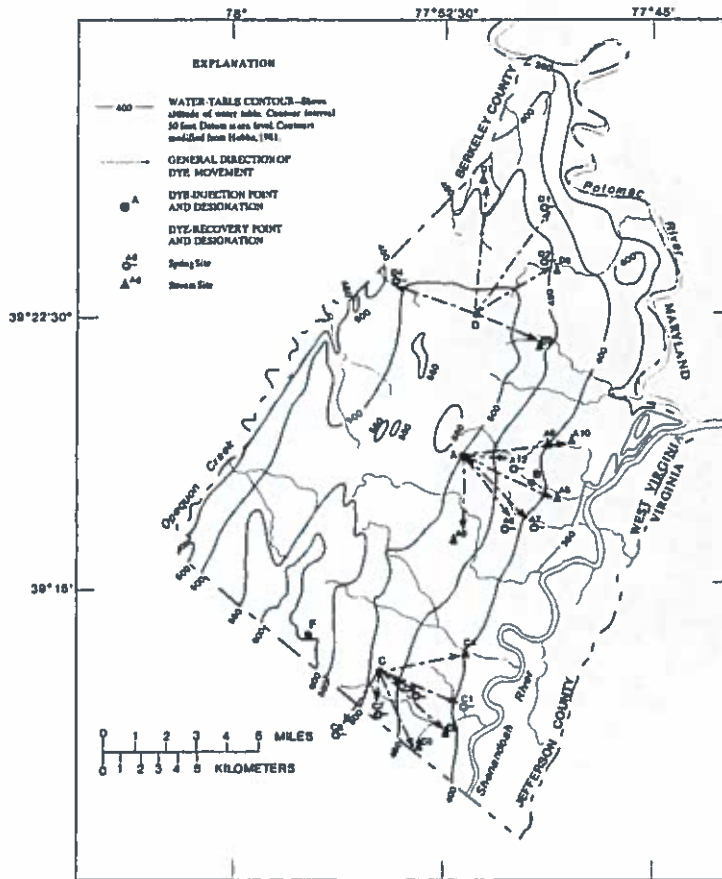


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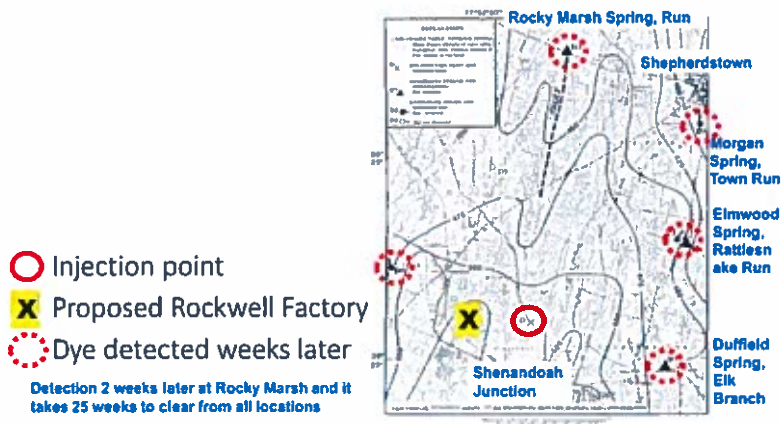


Figure 8:

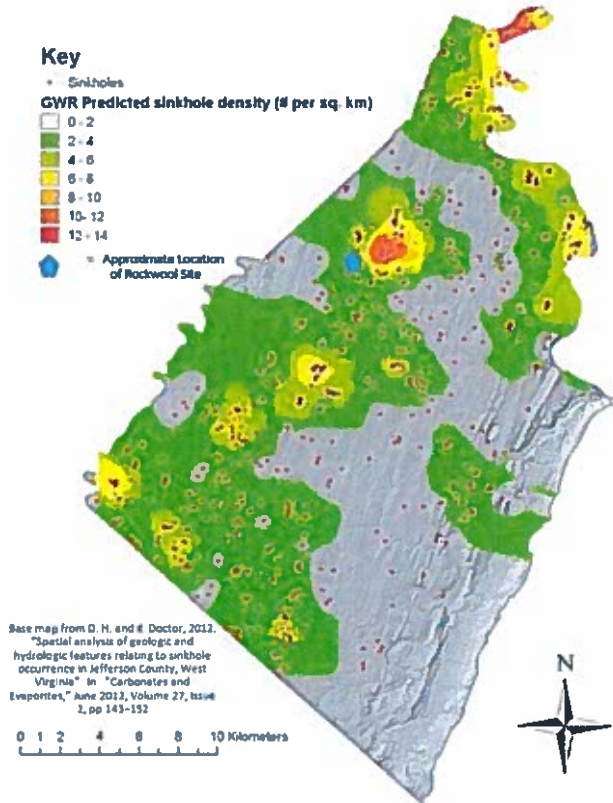
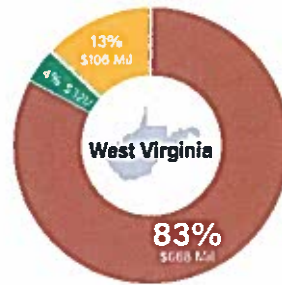


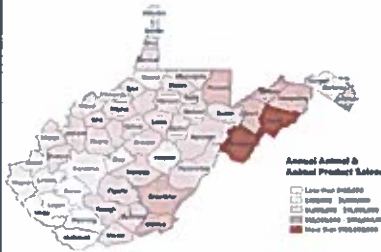
Figure 9:

Jefferson County was in the top 9 counties for animal and animal product sales in West Virginia (total state sales: \$668 million), the second highest producing county for field crops with more than \$10 million in sales (total state sales: \$106 million), and the third highest county for vegetables and fruit sales with over 1.9 million in sales (total state sales: \$32 million).

Source: Modified from West Virginia Department of Agriculture Full Report from 2012: A Shared Agenda for Growing West Virginia's Agriculture Economy



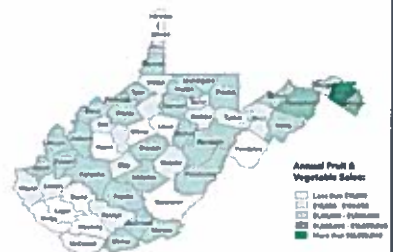
Animals & Animal Products



Field Crops



Fruits & Vegetables



Jefferson County Foundation, Inc.

November 4, 2019

Director, Division of Water and Waste Management, WVDEP
 ATTENTION: Sharon Mullins, Permitting Section
 601 57th Street SE
 Charleston, WV 25304-2345
 Sharon.A.Mullins@WV.Gov

RE: Public Hearing/Notice No. SM-108-2019. Application Nos. WVR108876 reissue #2 and WVG611896.

Dear Director:

The Department of Environmental Protection should deny Rockwool requested permits because it is unable to operate its proposed business in a manner that protects the water resources of Jefferson County. For the reasons stated below, Rockwool has not demonstrated the competence or capability to comply with the various controlling regulations established to protect the water resources of the County, and thus the surrounding waterways. The failure of Rockwool to demonstrate the technical competence necessary to build and operate its facility is reason alone to deny the permits; or, in the alternative to modify the permits in a manner that requires Rockwool to take mitigating action to prevent groundwater and surface water contamination far beyond what it is doing now.

The issues identified below, as well as other information that has been provided to the DEP, raise serious issues not currently addressed by any DEP evaluation. The law requires that DEP consider and respond to all comments in a substantive manner, and we expect the DEP response to comprehensively address the issues raised below. Please note and take into consideration that a great majority of the people and agricultural businesses in Jefferson county depend on groundwater and cannot feasibly, for financial, logistical, and geographical reasons, switch to using treated water.

Finally, as discussed below, we believe that the DEP should hold an "evidentiary" hearing in Jefferson County in which the public is able to present the technical, expert, evidence about the existential threat posed to the water sources in Jefferson County. We have the evidence necessary to demonstrate that allowing Rockwool to operate here presents a risk that the DEP should not allow, and will create liabilities that West Virginia cannot bear. We believe that an evidentiary proceeding would be the most efficient and effective manner for the DEP to

PO Box 460, Ranson, WV 25438
 Jefferson County Foundation, Inc. is a 501(c)3 Non-Profit organization.

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determine whether Rockwool is able to operate its facilities in compliance with the controlling state and federal environmental regulations.

Comments on Permit Registration No. WVG611896, which allows operation under WV NPDES Permit No. WV0111457 Multi-Sector Stormwater General Permit.

Technical Comments on WVG611896

Hydrogeologic setting and associated vulnerability of groundwater resources:

Site selection and planning:

It has been well defined that the Rockwool's Ranson facility is sited on Karst geology¹. Despite this information being readily available, when originally permitting the Rockwool facility, the Site Selection Criteria (West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.10) were not followed. "Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s), subsidence, or delineated wellhead protection areas, as determined by the Bureau of Public Health. If areas of karst, wetlands, fault(s), subsidence, delineated wellhead protection areas or other areas determined by the director to be vulnerable based on geologic or hydrogeologic information, are determined to exist then the facility or activity design must adequately address the issues arising from locating in the area(s) of a potentially more vulnerable groundwater resource". This facility should never have been permitted on karst. Rockwool clearly did not describe an understanding of Karst in its original 2017 permit application.

Rockwool should be sited in a more appropriate location.

Karst aquifers are known to be "extremely vulnerable to pollution" due to direct connection between the surface and underlying high permeability aquifers². The groundwater at the Rockwool site is only 60 feet below the ground. Further Karst is known to have "severe ground instability problems"³. This puts buried utilities like sewer and gas lines at risk for damage or

¹ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. Field Guides. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In Sinkholes and the engineering and environmental impacts of karst 2008 (pp. 12-22).

² Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. Earth-Science Reviews. 2014 Nov 1;138:61-88.

Ford D, Williams PD. Karst hydrogeology and geomorphology. John Wiley & Sons; 2013 May 3.

Zhou W, Beck BF. Engineering issues on karst. In Karst management 2011 (pp. 9-45). Springer, Dordrecht.

³ Doerfliger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). Environmental Geology. 1999 Dec 1;39(2):165-76.

failure with subsequent ground or surface water contamination. This makes the “aquifer vulnerability” in karst areas very high⁴.

A simple peer reviewed literature search reveals a plethora of information highlighting the risks associated with development in karst geology and many techniques for studying the impact of development on such land. It does not appear as though the municipality of Ranson employed any of these methods when it incorporated or rezoned this area. However, this oversight or lack of due diligence by Ranson does not absolve the DEP of its responsibility and liability to protect the water resources. Such a search will also reveal many techniques and methods for designing best strategies for limiting risk in a Karst area. It does not appear as though Rockwool employed any of these techniques or guidelines. It seem catastrophic failure of a liner and the contents of the basins escaping into the groundwater resource maybe the only way that Rockwool will know a sinkhole has formed under one of its sediment basins.

It is clear that for decades now policy makers have been using “Aquifer Vulnerability” measures, of which Karst is very high, to set land use and water resource protection policy. The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document *Stormwater Management Design in Karst Areas* states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”

This development is clearly inappropriate for this location. Information to this effect is well rooted in the peer review literature and has been widely available for decades now. Why then would this industrial permit be approved? Rockwool should relocate in a more appropriate location where it is not such a risk to the water resources. Rockwool has clearly not demonstrated an understanding of the importance of the hydrogeologic setting and therefore at least the permit should be denied until it is more appropriately understood and addressed.

Sinkholes:

Karst geology is prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater.

The Rockwool site is located in the area with the largest sinkhole density in Jefferson County (see footnote 1). Furthermore, a study demonstrated that in this area, several factors increased the rate of sinkhole development and these included presence of surface water and development (see footnote 1). Again, the DEP guidance documents agree. The Chesapeake Bay karst stormwater guidance document, which WVDEP cites, clearly states that detention and retention ponds are not recommended on Karst. Again, quoting WVDEP’s own Karst guidance:

⁴ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

“attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Therefore, just by virtue of disturbing the ground on the site and creating ponds as Rockwool is seeking permit permission to maintain, Rockwool will actually increase the rate of sinkhole development.

As of this summer, there were at least 17 sinkholes on Rockwool’s site. Most of these sinkholes are inside of stormwater ponds, with seven sinkholes appearing in Rockwool’s rainwater reuse pond during construction. Rockwool was cited for failure to report a sinkhole, when the first sinkholes appeared in 2018.

The DEP approved Rockwool’s sinkhole mitigation procedure in 2018. First, the sinkhole mitigation procedure allows too much time to pass between the identification of a sinkhole and when it needs to be repaired – time that allows for possible drinking water contamination. The DEP should require reporting within hours of noting the sinkhole, and emergency intervention to happen within 24 hours. The DEP should directly oversee these repairs. Each sinkhole should be evaluated to ensure the optimal remediation procedure is employed⁵. There is no contingency for addressing any new sinkholes, which might open up, nor any discussion of inspecting swales, ditches or ponds related to the stormwater management to check for new sinkholes. Again it seems that the only way Rockwool will know they have a problem is when there is catastrophic failure. As mentioned above Rockwool should be required to have a multimodal detection system for sinkhole development.

In the IEP, Rockwool states, “due to the karst features underlying some of the property, voids and soil filled zones are located within some of the Limestone bedrock. A geotechnical survey conducted in 2017 identify karst anomalies within this property. Following the geotechnical survey and during construction, Rockwool identified and mitigated ten sinkholes on site reported to the WVDEP, as of June 21, 2019, shown on the attached Figure 2A. Rockwool prepared a supplemental Structure Sinkhole Repair document that was approved by the WVDEP to properly repair the sinkholes and mitigate potential contaminant pathways to groundwater. During construction, identified and located sinkholes were remediated following the procedure described in the supplemental sinkhole repair document, approved by WVDEP. The intention of repairwork was to minimize infiltration and additional solutioning.” With repeated mention of “WVDEP approval”, it is obvious that Rockwool is putting the liability with respect to sinkhole management on the DEP. Shockingly, this paragraph is the first mention of karst in the document. This statement is not even correct, as there were at least 17 sinkholes on site at this date.

⁵ Zeng Y, Zhou W. Sinkhole remedial alternative analysis on karst lands. *Carbonates and Evaporites*. 2019 Mar 5;34(1):159-73.

Zhou W, Lei M. Conceptual site models for sinkhole formation and remediation. *Environmental earth sciences*. 2017 Dec 1;76(24):818.

Huckert A, Garcin P, Villard P, Briçon L, Auray G. Experimental and numerical approaches of the design of geotextile-reinforced embankments prone to sinkholes. In *10th International Conference on Geosynthetics 2014 Sep 21 (Vol. 21)*.

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development and earth movement under such liners. In an effort to prevent disaster, Rockwool should be required to install the latest technology in and beneath the liners⁶. In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner stress given the risks associated with failure.

The DEP director can and should require Rockwool to perform routine groundwater monitoring. It is unacceptable that Rockwool has not included this in its plans. With regard specifically to outside material storage and disposal areas, and impoundments, for industrial facilities, West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that "Placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring," and "Groundwater monitoring stations may be necessary to assure protection of the groundwater resource." Given the information cited above about the sinkholes on site and our sensitive groundwater resources, DEP should require regular and frequent monitoring and reporting of groundwater.

Inappropriate storm water design for Karst geology:

In this section, Rockwool mentions 10 sinkholes were identified as of June 21, 2019, however, the number identified at that time was 17. Further they say, "the Level 1 Bioretention Areas are designed so that infiltration is not used." This needs to be clarified. These bioretention ponds are not noted to be lined so it is unclear what Rockwool is referring to when it says infiltration is not used. This needs to be addressed before this permit can be approved.

Topographic and Site Map:

The Multi-Sector General Permit requires a topographic map be provided that extends at least a mile beyond Rockwool's property that shows the following: all intakes and discharge structures, sinkholes, drinking water wells, springs, and surface water bodies. Rockwool's topographic map and site map are deficient. There are several of these features within one mile that are not shown, including known in use drinking water wells, sinkholes, and documented wetlands. Rockwool falsely claims there are no wetlands. Further, Rockwool only depicts 10 of the 17 documented sinkholes on its property and none beyond its property. Mountaineer Gas Company did an extensive Karst inventory of sinkholes prior to installing the natural gas pipeline and those sinkholes are also not discussed or depicted on any maps in the IEP or the General Permit application. Outlet #1 and #2 discharge to a field in the northern area of

⁶ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ. Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

Rockwool's property; it is unclear from the topographical map if there are sinkholes in this area. These deficiencies in the topographical and site maps must be corrected. Further, these deficiencies reflect a lack of respect for the neighboring community and resources.

Buried Utilities:

Rockwool failed to inventory and discuss its existing underground pipelines in the multi-sector general permit. Applicants are required to provide an inventory of all "operations, which may reasonably be expected to contaminate groundwater resources." The following potential sources are specifically listed: Outside materials storage areas, Disposal areas, Loading and unloading areas, Bulk storage and distribution areas, Drums, Sumps, Pumps, Tanks, Impoundments, Ditches, and Underground Pipelines. Rockwool specifically and falsely states that it has zero underground pipelines when, in fact, Rockwool has at least two underground pipelines, including a natural gas pipeline and a liquid oxygen pipeline.

The natural gas pipeline runs between the furnace side of the building and both the Sediment Pond and the Water Reuse Pond, within 10 feet of the stormwater discharge outlets. Rockwool's liquid oxygen runs from the oxygen tanks that sit immediately south of the Stormwater Detention Pond, under the perimeter road and on to the furnace building. This is not an inconsequential fact. As described above, due to the karst geology, these pipelines are at particular risk of damage leading to groundwater contamination or explosion and catastrophic damage. Underground oxygen piping is also particularly vulnerable to damage by lightning, which may ignite the pipe material.

Pipeline ruptures and explosions have occurred all too often as a result of the failure to monitor pipelines for corrosion or cracks. Rockwool has failed to identify any plans for pipeline monitoring. Such plans should be identified and included in any permit, and monitored by the DEP to ensure proper oversight and maintenance. The underground pipelines and their proximity to the Stormwater ponds and conveyances should be discussed in the IEP, as well as monitoring for corrosion and pipeline integrity.

Groundwater Protection Plan and monitoring:

A great majority of the households and agricultural businesses depend on groundwater. If the groundwater were to be fouled, it would devastate our equine and agricultural industry and therefore our economy. It would devastate our local government with restoration cost and legal cost as citizens seek restitution. It would be a major burden to households who will be forced to find alternate undoubtedly more expensive sources of water. We have seen this play out across our state as the unknown consequences of previous industrial and extractive activity came to bear. Here we have the chance to prevent it. We are counting on the DEP to protect the groundwater we depend on in Jefferson County.

The section of Rockwool's multi-sector application for groundwater data is woefully incomplete and demonstrates a cursory analysis of what is truly a foundational concern. The DEP guidelines for successful Groundwater Protection Plan lists the groundwater analysis, data and other related information that should be included. While Rockwool mentions it exist, it barely

addresses it. The plan requires “a discussion of all available information reasonably available to the facility of activity regarding existing groundwater quality at, or which may be affected by the site.” Previous groundwater data and monitoring are easily available from extensive USGS and county research, yet Rockwool doesn’t describe them. Rockwool also fails to describe the geophysical testing done in 2017. The narrative references groundwater data that are included in a table in the appendix, but the appendix section is incorrectly titled, the table has no descriptive text, and does not even label the units of measurement, rendering it useless.

As cited in the sinkhole section above, there are REAL studies that are applicable to the Rockwool site and sinkholes. A USGS study used dye tracer tests to determine rates and directions of groundwater flow within the karst aquifer. Dye was injected into a sinkhole in Shenandoah Junction, about a mile from Jefferson Orchards. Two weeks later the same dye was detected at a monitoring point north of Shepherdstown. Within 20 weeks, it was detected at an additional 5 sites between Kearneysville and Shepherdstown. The study reported movement of up to 840 feet per day – which indicates that contamination, can happen quickly. This sort of information is in fact “reasonably available to the facility” and should have been considered.

The director of the DEP can and should require Rockwool perform routine groundwater monitoring. It is reprehensible that Rockwool has not included this in its plans. West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that groundwater monitoring stations may be necessary to determine if contamination is occurring or has occurred, and also to “assure protection of the groundwater resource.” In section 4.9.c. it goes on to say, “new facilities shall monitor groundwater upon order of the director if the director reasonably believes that an industrial establishment or activity has the potential to contaminate groundwater.” Page 69 of the WVDEP stormwater management guidance document states, “monitoring wells and groundwater sampling may be required by the director for the assessment of the potential for or existence of groundwater contamination.” It is reasonable to believe Rockwool has the potential to contaminate groundwater, and monitoring for groundwater contamination should absolutely be required here. Given what we know about the sinkholes on site and our sensitive groundwater resources, and knowing that 70% of the people in this county drink well water, the DEP should require frequent monitoring and reporting of groundwater.

Gravel Surfaces:

Rockwool falsely claims to have zero graveled surfaces in the footprint of its drainage areas. There are clearly several areas on the site plan that depict gravel surfaces. Two significant ones include a pad near the sewer pump station and a one-acre, non-paved, non-vegetated, outdoor graveled area referred to as the “waste pit” or “melt for reuse” storage area (corresponds to Area B170 in the Air Permit). The waste pit or melt for reuse storage pad is particularly alarming as the things Rockwool plans to store here include, furnace tap out, melt for reuse, waste insulation, returned insulation, and dewatered Water Reuse Pond cleanout. If these items are stored for more than 180 days, Rockwool may need to apply for a RCRA Subtitle D industrial waste storage permit. These unlined areas are susceptible to infiltration and pose a risk to both groundwater and surface water. These areas have not been evaluated and IEP must discuss

these areas and the storage of waste products, by-products, and materials destined to be recycled.

Process wastewater illegally allowed in Outlet #2:

Storm water that runs off site B170 waste pit or melt for reuse area that is described in the above section will go to Bio-retention Basin #2 via a perimeter ditch and then to outlet #2. This water is not stormwater; it will actually be process wastewater. West Virginia Legislative Code §47-10-2.41 defines “process wastewater” to mean any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. As described in the above section, site B170 will contain water and materials that have contacted it processes, and come in contact with the aforementioned products. Discharge of anything other than stormwater is prohibited from outlets. Therefore this is an illegal discharge and should not be allowed.

The Water Reuse Pond is not a stormwater structure:

Rockwool states that “filter backwash” and “heat” water will go to the Water Reuse Pond. Rockwool claims the Water Reuse Pond is a stormwater management structure. However, “filter backwash” and “heat” are considered pollutants by the EPA (40 CFR 122.2). Therefore, these materials are process-related industrial pollutants. Further, the pipe that carries these materials to this pond must be treated as a point source of industrial effluent and regulated as an outlet. Rockwool describes in the IEP that runoff from to this pond could, “contain dust from handling of raw materials for the melting process, which would include solid materials such as stones, slags and melt for reuse items,” and this pond could receive sprinkler system drainage from inside the binder storage building. By design, the pond has no outlet for overflow. During construction, 7 sinkholes formed inside of this pond. It is now designed to have a triple liner to prevent further infiltration to groundwater. So, with no outlet and a liner, this is actually a pool, and by Rockwool’s own admission, it may contain more than just rainwater. This pond cannot be classified as simply a stormwater management structure. This pond must have threshold-monitoring requirements with routine sampling of the contents.

The IEP describes how this pool is sized for a 100-year rain event, and in the event that it is approaching capacity due to a large storm event, Rockwool can store and treat the water. “For example, RAN5 could employ water tank trucks to haul off water to be treated at a designated publicly owned treatment works.” It is unclear which POTW they are referring to. If it is Charles Town, this should have been described in the NPDES modification that was approved on March 1, 2019. Since it was not described, it should not be allowed by the Charles Town Utility Board (CTUB). This is too serious a risk to not be specifically addressed. Rockwool must amend its application to identify what is the trigger for the preparation for a “heavy rain event,” where are the water tank trucks going to come from, if the trucks are contracted how will Rockwool ensure that they are actually available when needed, how will it ensure that the drivers and operators of these water tank trucks are actually properly qualified to be handling contaminated water, and most importantly where will these trucks dispose of the contaminated water? What location has agreed to take such water?

Rockwool should be required to test the contents of each tanker truck before it is hauled away, to ensure no hazardous materials are mixed with rainwater, and that the trucks are not then contaminated for further water hauling. This should be further evaluated and well defined in the Rockwool permit application.

Potable water used for Fire protection is admixed with stormwater:

The Multi-sector General Permit has a pure prohibition of non-stormwater discharges. The discharge water that Rockwool seeks permit coverage for contains a significant volume of treated well-water (potable water), supplied by Jefferson Utilities Inc. (JUI), that will be used for fire protection. Rockwool's site plan (approved by the City of Ranson) calls for a fire protection water line, supplied entirely by potable water. Rockwool's Industrial User NPDES permit, issued to the Charles Town Utility Board (CTUB) on March 1, 2019 (WV0022349), the potable water flow for fire suppression will be 75,268 gallons per day. This is a significant amount of water and well water used for fire suppression is not stormwater. Yet, the water from fire line flushing, training, and actual fire fighting would flow through all three of the drainage areas, and would convey to all four stormwater management structures. Rockwool must thoroughly and appropriately characterize how the potable water discharges related to fire protection will be handled so that it does not mix with stormwater. The permit must be modified to address this important issue. .

Rockwool's IEP fails to identify all of outdoor process activities:

According to Rockwool's air permit (R14-0037) describes a "melting furnace portable crusher" as an outdoor process. This process is a significant source of dust and fugitive particulate matter, third only to the two steam stacks. This process is planned at least quarterly. The air permit describes this process as occurring in a dedicated area that is uncovered and unpaved, B170. Therefore, B170 is also a materials processing area in addition to a storage area for process-related industrial pollutants as described in a previous section. Again, this area is uncovered, unlined, and about 20 feet from the Water Reuse Pond and Bioretention Basin #2. This outdoor process must be considered in the IEP.

IEP fails to address the potential for dust and particulate contamination of stormwater discharges:

Rockwool will produce fugitive dust and particulates that may contain formaldehyde, menthol, phenol, silane coupling agents, and other hazardous substances. Several processes generate fugitive dust, including the portable crusher operation mentioned in the previous section. This process is entirely uncontained and uncontrolled by any pollution control devices. In addition, Rockwool's controlled processes will produce up to 134 annual tons of PM_{2.5} and 154 annual tons of PM₁₀. Air modeling suggests that the bulk of the dust and particulates will fall out within Rockwool's drainage and be deposited on building roofs, asphalt surfaces, parking lots, roads, and vegetation. The stormwater, which falls on these surfaces, will capture the dust and hazardous particulates contained within and convey them to the stormwater and bioretention ponds and outlets. As a consequence of the toxic nature of the underlying contaminants, these captured contaminants have the potential to negatively impact groundwater and surface water.

The effect on water resources has not been evaluated and needs to be addressed before this permit is approved.

Internal plumbing plans should be included in the application:

The IEP shows that the Stormwater Management Pond that drains areas HrC and HeB, which covers parts of the manufacturing facility, discharges to a field north of Rockwool through Outlet #1. This Outlet #1 is expected to have discharge of 86,330 gallons per day. Is all this water in fact stormwater? Further in section 4.4.7 of the IEP it states, "no interior building floor drain is designed for connection to the storm drain system." Does this mean it will not connect or it may inadvertently even though it is not "designed" to do so? This should be clarified. It continues in this section to say that "floor drains in office space, bathrooms, and other areas are directed through the sanitary sewer to Charles Town WWTP." These "other areas" need to be clarified to determine where the other areas are and where they discharge. It is unknown if these "other areas" include process area floor drains and if these drain to the Charles Town WWTP. The DEP must require that the application contain the internal plumbing plans, to determine that no process water from the facility is expected to be discharged into ponds with a discharge to the natural environment. No permit should be issue until this matter is specifically resolved.

Storage of unknown chemical in close proximity to water rescors:

Seven of the 13 Aboveground Storage Tanks (AST) on site have undisclosed contents and hold 88,500 gallons of unknown chemicals. If the contents of the ASTs are unknown, there is no way to determine if the ASTs are in compliance with 47 CSR 63 (AST Design Construction and Installation), or if proper and adequate containment is provided. It is impossible to evaluate the application for adequate groundwater protection water recourses absent this information. Further, it is reckless to allow unknown industrial chemicals this near stormwater ponds, sinkholes, and water supply protection zones on karst geology.

Additionally, there is no information provided about Rockwool's plans to monitor and ensure tank integrity. The risk of corrosion, leaks, and vapor releases from storage tanks has resulted in multiple disasters in this country. Rockwool's permit application must include its plans for tank integrity inspection.

If there were a spill, the public utility leaders would need to know the contents immediately. This information needs to be on file so an appropriate plan can be made before it is an emergency situation. Disclosure of the contents of these ASTs is imperative, required by statute, and should be part of the permit. Until this information is included with specificity the permit should be denied.

Substantial Harm Determination:

The Rockwool Facility is located such that any toxic release to groundwater or surface water form the facility would shut down at least one public water supply and should therefore be classified with a Substantial Harm Determination. Harpers Ferry sources their drinking water from Elk Run, Jefferson Utilities Inc. from the aquifer, and Shepherdstown from Rocky Marsh

Run. Additionally, there are thousands of households, businesses, and farms that source their drinking water for humans and animals from private wells in the aquifer. As discussed in the karst section of this document, the aquifer is contiguous over a long area of the county and the flow rate of the aquifer is rapid. A Substantial Harm Determination would require some relevant safeguards be in place.

Waste material usage:

Rockwool states, “No wastes or waste materials are used for deicing, fills, or any other uses on site unless provided for in an existing rule.” The ‘existing rule’ needs to be further defined so that it can be determined what material is being used for what. The permit should not be approved until this is done.

Inappropriate Facility Design, Control, and Operations:

This sections states, “storage of solid waste or recycled material is constructed with an appropriate concrete surface that is chemically resistant to waste or recycled material. Liquid is not stored in designated solid waste or recycled material areas and containers that are outside have cover lids. The collection system is connected to the process water system and does not discharge to the stormwater outfall.”

The solid waste area needs to be lined, in addition to a 'concrete surface that is chemically resistant.' DEP guidance for stormwater controls says it requires “the employment of mitigating practices to eliminate potential contaminants from reaching the stormwater structure.” Although the rainwater reuse pond is lined, there is still a risk of groundwater contamination via this structure, as there are 7 sinkholes under the pond already. Therefore, more needs to be done to prevent waste products reaching the rainwater reuse pond.

Also, the gravel pit discussed earlier and labeled “waste pit” or “melt for reuse” storage area will also contain waste and it is also unlined. However, this will come into contact with liquid as it is uncovered and is the destination for dewatered sludge form other ponds. These areas have not been evaluated and they must be addressed along with the storage of waste products, by-products, and materials destined to be recycled. It is possible the RCRA should apply here. The permit should not be approved until this issue is specifically addressed, including an analysis of whether RCRA applies to these activities; and, if so, whether proper regulatory action has been taken.

Inappropriate description of ponds and site runoff design:

Rockwool states, “the outfall discharges water onto an outlet apron during discharge to maintain non-erosive discharge velocities.” The outfall apron needs to be better described and monitoring parameters with action trigger points need to be defined to prevent erosion and sinkhole formation. Rockwool further states in this section, “for construction activities that will disturb the soil, appropriate notifications or applications are made to the WVDEP and Jefferson County to ensure compliance with local and state requirements. The site is currently continuing construction under approved West Virginia Construction General Storm water Permit, WV 108876.” This is already inaccurate and not being followed. Rockwool did not apply for

coverage under the statewide stormwater construction permit in a timely manner, and has been operating without coverage. This fact must be taken into consideration when making final decisions regarding the trustworthiness and reliability of Rockwool.

Administrative Comments on WVG611896:

There are also administrative reasons that the permits should not be approved. The Multi-sector permit is for post-construction activities and should not be authorized until all construction is complete. At this time, the construction permits have not even been completed. A version of Rockwool's Multi-sector permit was released by DEP to WV Rivers Coalition on October 21, 2019. The PDF contains the word "draft" but the document itself is not stamped draft. A letter, which was not dated, that was sent from DEP to Rockwool says that the permit has already been approved. This coupled with the PDF not being stamped is concerning because the public comment process is not even finished. If the permit was actually approved prior to the public comment period being completed and the issues raised by the public resolved, that would be a violation of the process for granting the permit. Please explain whether this permit was actually already granted, and by whom? If not granted, please explain the letter.

Further the State-wide Multi-sector permit was just renewed on October 12, 2019. This most recently approved version is more protective of the environment and people than was the previous iteration and therefore requires companies like Rockwool to be more vigilant and responsible. Is this why Rockwool's Multi-sector permit was effective on October 12 under the previous iteration of the state wide multi-sector permit that is less onerous and far less protective of our environment and our drinking water? We expect an explanation for the date of issuance, and whether the approval in accordance with the previous Multi-sector permit regulations was actually granted prior to this process being completed. We believe that this may give rise to a legal challenge on the validity of the permit.

Rockwool is a new facility, is not yet operational, and has not submitted a correct or complete application as of yet. The Draft Permit Registration should be corrected to reflect Rockwool's potential operation under the 2019 WVDEP EPA-approved WV NPDES Permit No. WV0111457. However, we believe that when and if Rockwool is able to submit a complete and accurate application that is truly sufficient to protect our ground and surface water resources, this should be an Individual WV/NPDES Water Pollution Control Permit and not a Registration under Permit No. WV0111457. We believe that under 47 CSR 10 Section 13.6.B.2.a that the WVDEP director should require Rockwool to maintain this separate permit that will provide more protection to our groundwater resources.

Inappropriate Signatory:

In section 4.6, it states "4.6.a.1.A. A president, secretary, treasurer or vice-president of the corporation in charge of a principle business function or any other person who performs similar policy or decision making functions for the corporation; or 4.6.a.1.B. The manager of one (1) or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars

(\$25,000,000), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.” The IEP is signed by Mark Graves; to our knowledge, he does not qualify as a signatory. This is significant, because the permit may have been more accurate if one of the above-mentioned individuals had signed it under penalty.

Public Comment on Roxul’s Permit Registration No. WVR108876 Reissue #2 for Coverage Under the General WV/NPDES Water Pollution Control Permit No. WV0115924

Technical Comments on WVR108876 reissue #2:

Inaccurate limit of disturbance:

According to Deed Book 1197 Image 672 Section C, Section D and Section 2, Rockwool was granted a 5.7 acre construction easement. This acreage should be included in the limit of disturbance (LOD). This would take the LOD to 104.5 acres, triggering the requirements for LOD greater than 100 acres. This is a material and substantial alteration and addition to the permitted facility that is not represented in the existing permit. As required under 47 CSR 10, Section 9.2.b in accordance with Section 10 and the public notice procedures of Section 12, should this information have been reported when it was finalized on October 25, 2019, and should this permit application be revised to reflect this addition?

In addition, defined in the DEP LOD rules, “disturbed area” should include the Water Line, Gas Line, and Planned Sewer Line disturbances that occurred on Rockwool property must also be considered part of Rockwool’s LOD. Further, the previously submitted soil maps in the original 2018 approval of WVR108876 suggest the LOD, based on soil type, to be greater than 100 acres.

These facts have not been taken into consideration in connection with the Permit Reissue and must be prior to any final issuance.

Sinkholes:

Sinkholes, as noted above in the technical comments for the multi-sector permit, are a significant concern as they lead to direct contact of ground water with surface water and any contaminant that surface water may carry. Rockwool doesn’t seem to appreciate or understand this issue. . On July 19, 2019 a DEP permit reviewer requested additional information, “Sinkholes. Include table or color code to denote status of sinkholes.” Rockwool failed to respond in either the application or the draft. The locations of 10 sinkholes are noted, but there are 17 documented sinkholes.

There is no information about current mitigation status of currently documented sinkholes, contingency for addressing any new sinkholes or of detection strategies for new sinkholes in swales, ditches or ponds related to the stormwater management. Under this permit, the only way that Rockwool will know a sinkhole has formed under its sediment basins is when

catastrophic failure of the liner occurs and the contents of the basins escaped into the groundwater resource. This is completely unacceptable.

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development and earth movement under such liners, in an effort to prevent disaster. Rockwool should be required to install the latest technology in and beneath the liners⁷. In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner stress given the rinks associated with failure.

Receiving Stream:

The receiving stream is again listed incorrectly as Elk Run. Again, the correct stream is Rocky Marsh Run, as is noted on DEP's inspection reports for Rockwool. Naming the right stream is not difficult to do! Yet this is not an inconsequential matter. In fact, it is critical. Understanding the watershed is central to these permits because the whole point of these permits is to protect the water resources!

Inappropriate and ill-defined flows:

Rockwool claims that Outlet 1 will have 86,330 gallons of stormwater flow per day and Outlet 2 will have 10,207 gallons of stormwater flow per day for a sum of 96,537 gallons of stormwater per day. Oddly, this seems high; more peculiar still is that it is nearly equal to Rockwool's average projected industrial wastewater discharge volume of 97,650 gallons per day, as obtained from a flow diagram to the Charles Town Utility Board for their NPDES permit (WV0022349) modification. Why are these numbers so high and what is the significance of the similarity?

Public Notice Sign:

The permit required signage at the site is and has been incorrect since it was installed. It has the incorrect date and was originally installed in the incorrect location. This needs to be addressed prior to the issuance of any permit.

Unresponsiveness to Technical Requirement of Outlet Design:

Velocity dissipation devices are required by the General Permit for the two designated outlets, to limit erosion and sinkhole formation. However, Rockwool's Sediment & Erosion Control Plan only calls for a "flow spreader" (Appendix B, Figure 2). This is inadequate to meet the General

⁷ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ. Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

Permit requirements and will not protect against erosion. The General Permit requires "Outlet protection from a pond, waterway, diversion or culvert must extend as a properly stabilized waterway to a natural stable waterway." The outlets are depicted as discharging to an open field. This open field will not act as a natural stable waterway in this karst environment, especially with the potential discharge of 96,537 gallons per day.

This issue must be addressed prior to the issuance or reissuance of any applicable permit.

Administrative Comments on WVR108876 reissue #2:

The public has not been given information to understand which version of the statewide stormwater construction permit Rockwool would be authorized under. The first "2019" version, EPA approved and was effective February 9 of this year, was challenged by some industry groups, and the resulting settlement produced major changes which weakened the permit. Those changes are still pending, because the EPA has not yet approved the revised permit. Which version of the 2019 statewide permit will Rockwool be authorized under? The first version, or the version with substantial changes? The permit should not be approved until this is made known to the public and the public is given time to comment.

Rockwool did not apply in a timely manner for the new 2019 permit and is currently operating without a permit. The 2012 permit it had been authorized under has expired. Again, DEP has not answered our direct questions about this. Any discharges that Rockwool is generating at this time, may be unauthorized and in violation of the Clean Water Act. This kind of flagrant disregard for the rules is unacceptable.

Rockwool began an application process to re-issue its stormwater construction permit in the fall of 2018, but withdrew it for unknown reasons. In November 2018, Rockwool went over one year in construction, and had substantial changes due to sinkhole remediation, yet DEP allowed them to operate without completing the application for re-issue.

Rockwool should be required to stop construction until this current application is approved. DEP stormwater management guidance document notes that groundwater protection plans need to be in place BEFORE stormwater structures are built.

Comments on Rockwool's Competence and Character for both WVG611896 and WVR108876 reissue #2:

We believe that as career officials and environmentalists, you care about the environment and both how that environment affects quality of life and public health, as well as how human activity and industry affect the environment. For its part, Rockwool has shown from site selection to the careless and the downright negligent way that it has produced applications and

conducted itself, that it has no such respect or care for our environment, our health, or our way of life. As we have highlighted, this is an abhorrently inappropriate location for such an installation and the current iteration of the permits do not go nearly far enough to protect the environment or the public. Further, the level of errors and misrepresentations in every permit Rockwool has submitted and its inability to comply with those permits demonstrates either sheer incompetence or intentional misrepresentation and negligence or both. We want to highlight a few of the many errors, incorrect information, and sloppy report preparation over several permits that call into question Rockwool's ability to hold a permit and operate in accordance with laws and regulations. Attached is a more extensive but not exhaustive list.

In its 2017 application for stormwater construction, Rockwool named the wrong receiving stream on its permit application. The correct receiving stream is Rocky Marsh Run. A year later, Rockwool continues to be inconsistent about this simple fact, using six different incorrect stream names. Sometimes, it correctly names Rocky Marsh Run, in other places, it names other streams, including Shaw Run, unnamed tributary to Elk Run, Pikeside Channel, Cold Spring Run, Opequon Creek, and Evitts Run. Naming the right stream is not difficult to do! This is not an inconsequential matter. In fact, it is critical. Understanding the watershed is central to these permits, because the whole point of these permits is to protect the water resources!

On its multi-sector permit application, Rockwool indicated that its two stormwater outflows were going to be discharged to Evitts Run, which is incorrect, as we just noted. Rockwool also said stormwater was going to the city of Charles Town stormwater management system, which doesn't even exist! At DEP's request, Rockwool has since fixed this error, but it is such a glaring error that one has to ask: was this incompetence or intentional? Again, the correct stream is Rocky Marsh Run. This is important because this stream is in the source water zone for Shepherdstown's water supply! Even more disturbing is that Rockwool does not include the nearby source water protection area for Shepherdstown in its Spill Prevention, Control, and Countermeasure plan. This is alarming because as the receiving stream Rocky Marsh Run and therefore Shepherdstown's water would clearly be affected by a spill. This demonstrates a disregard and carelessness toward the effect they will have on the local water resources.

On permit applications, Rockwool has repeatedly given construction timelines that were many months to years shorter than was actually needed. Rockwool has repeatedly failed to check the box on its applications for "Grading period to exceed 1 year" and sign the associated statement for billing for public notice. This was not simply poor estimation as on the first stormwater construction permit reissue Rockwool responded to application section 10 entitled *Estimated Start and Completion Dates for Project*: "Start: October 2, 2017 Completion: September 2019" This was over 1 year, yet the checkbox was not marked. In May of this year, Rockwool requested and had a termination inspection for its stormwater construction permit. It was clearly not finished site work at that time. The termination was denied for this fact. But what prompted this termination inspection? Was it done in good faith? This demonstrates a general disregard for the requirements and standards.

Rockwool has already been cited for six types of non-compliance of its stormwater construction permit including failure to report a sinkhole. This is deeply troubling because sinkholes are precisely the thing that could have a catastrophic effect on our groundwater and surface water resources. This failure to comply demonstrates either an unacceptable level of incompetence or a disregard for the requirements that rises to the level of malfeasants.

These permits should not be approved and we ask that under 47 CSR 10 Section 13.6.B.2.a that the WVDEP director should require Rockwool to be approved for and maintain an individual WV/NPDES Water Pollution Control Permit and not a Registration under Permit No. WV0111457.

Request for an Evidentiary Hearing for WVR108876 reissue #2 and WVG611896:

Environmental regulations are based on the premise that Permittees, such as Rockwool, operate in accordance with the rules and regulations that have been established to protect the public from environmental contamination and degradation, Rockwool has a duty to comply with all conditions applicable to all permits. WV 47 CSR 10-5.1 To this end there is a relatively complicated and integrated environmental protections regulatory scheme that is supposed to provide that protection, and it is effectively dependent upon voluntary compliance and truthfulness.

It is not possible for the government to be present at every potentially hazardous or contaminating event – every time a worker opens a valve to discharge hazardous chemicals or polluted process water, or every time there is manufacturing malfunction. So, industry is supposed to comply with the laws and follow the requirements of the permits that govern their activities. The Statute clearly states, “The permittee must comply with all conditions of this permit.” WV 47 CSR 10-5.1.(a) In order to comply, a company must be both competent to operate in accordance with those rules and requirements and have the character and integrity to be honest about the inevitable malfunctions, unknown human errors, and unanticipated events that pose a risk to the public.

Rockwool has not demonstrated either the character or competence to be given the permits that it seeks to operate in Jefferson County. As noted throughout this submission, it has provided inadequate, incomplete, inaccurate and misleading information upon which it requests approval for the DEP. Where, as here, Rockwool has failed to “disclose fully all relevant facts, or the permittees misrepresentation of any relevant facts at any time” the Permit may be Suspended or Revoked. WV 47 CSR 10-9.4.a. Rockwool has done just that and provided inaccurate, incomplete and deceptive information designed to frustrate the attempts of the DEP to review and understand its plans and processes. The DEP is a resource stressed organization, with only a few professionals to evaluate the permits, and legions of lawyers from Rockwool to pressure DEP to approve its permits regardless of the information provided.

DEP operates its program under an Agreement with the federal Environmental Protection Agency (EPA), and all applications for permits under the National Pollutant Discharge Elimination System (NPDES) Program must meet the requirements of the EPA approved process. WV Code 47 §47-10-2.3, and the federal Clean Water Act §307, 308, 402, and 405.

As you know, any permit issued “may be revoked, suspended, revoked and reissued, or modified during its terms for causes as set forth in Section 9...” WV Code 47-10-3.4. In addition, where as here, there are conditions of the permit that do not provide for compliance with the applicable requirements of the federal Clean Water Act and the State Acts, no permit should issue at all. WV Code 47 §3.6 (a). So, for example, all of the issues raised above regarding the Karst geology and the risk posed for groundwater contamination have not been adequately addressed and Rockwool can not comply with the requirements of the federal Clean Water Act or state regulations. This is a serious issue that, in its present configuration, make compliance virtually impossible. Additionally, various risk factors identified above, have not adequately been explained, such as the unspecified and undesignated water tankers removing contaminated pond water in a heavy rain event. This, and other issues, confirm that no permits should be issued to Rockwool until adequately and completely addressed. Rockwool has also demonstrated that it does not have the character to be trusted to provide truthful information upon which the department can rely. Although Rockwool’s Vice President Kenneth Cammarato signed the Construction Stormwater Permit application, under the penalty of fine and imprisonment for submitted false information, 47 CSR 4.6 (d), there are several places in the submittal that contain demonstrably false information. As described above, and in other comments, the size of the “limits of disturbance” is the relative timeline for sediment disturbance. Originally, in 2017, the representation was for a mere 21 weeks, now we are already at 10 months of earthwork. See, other comments submitted for additional information on inaccurate and incomplete information regarding the length of time for the grading phase of construction, the size of the area being developed, i.e., more than 100 acres.

For all of these reasons, the citizens of Jefferson County suggest that merely submitted public comment to the Agency for review is inadequate to demonstrate the Rockwool should be granted the permits it seeks. Under the federal Clean Water Act, and other federal statutes, the state of West Virginia must demonstrate that it is able to investigate, review and then monitor any environmental permit that is issued. That it cannot do, and we request that in acknowledgement that the public in this case is more equipped to provide expert review and assessment of the permit applications that apply to our land and our water. We request that we be provided the opportunity to present such expertise at an evidentiary hearing where DEP is able to accept testimony from environmental experts on the reasons that the Rockwool should not be allowed to operate its facility in the location it is building on, hear Rockwool’s answers and explanations and make a determination after the receipt of such expert opinions and analysis. While not provided for by statute, it is also not prohibited by statute, and the Director has the full discretion to grant this request. WV 47 CSR 10 -5.8 “Duty to Provide Information,” requires that the permittee shall furnish to the Director “any information that the Director may request to determine whether cause exists for modifying, revoking, and reissuing, suspended, or revoking this permit or to determine compliance with this permit.” In this case,

the Director could require Rockwool to participate in an evidentiary hearing process as part of the permitting application and, upon receipt of the expert testimony and information provided to the DEP by the public, require Rockwool to respond to the information. Thus, making a decision, based on facts and evidence that challenges the inaccurate and incomplete information which Rockwool has submitted.

Best Regards,



Christine L Wimer MS, DVM, DACVS-LA
President, Jefferson County Foundation, Inc.

Enclosure: List of Permit Errors and Inaccuracies

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Jefferson County Foundation, Inc.

January 26, 2020

The Honorable Austin Caperton
 Secretary of the West Virginia Department of Environmental Protection
 601 57th Street, SE
 Charleston, WV 25304

Re: Industrial Stormwater Permit Application No. WVG611896

Dear Secretary Caperton,

Jefferson County Foundation respectfully submits the following comments on Rockwool's Multi-Sector Industrial Stormwater Permit Application No. WVG611896 and petitions the West Virginia Department of Environmental Protection (WVDEP) pursuant to West Virginia Legislative Rule 47CSR10 Section 13.6.b.2.A to require Rockwool to obtain a valid individual permit so that appropriate protections and oversight can be applied by the WVDEP to address all of the unique concerns the Rockwool facility poses. Among the reasons the WVDEP should grant our petition are that:

- Rockwool is a significant contributor of pollution and as such should be required to obtain an individual permit.
- Rockwool's facility is being located in a hydrogeologic setting with vulnerable groundwater resources, which can only be protected via the careful and tailored use of protective measures able to be imposed via an individual permit.
- Rockwool plans novel methods that are unlike those used in other mineral wool facilities in West Virginia and thus an individual permit is needed to appropriately protect the waters of the state.
- 11 other specific concerns have been identified that require an individual permit to be adequately addressed.

In support of this petition, below we provide a detailed explanation of our concerns.

1. **Rockwool is a significant contributor of pollution and should be required to obtain an individual permit. (47CSR10 Section 13.6.b.2.A.1)**

The Rockwool facility in Ranson, West Virginia will produce significant amounts of pollution in Jefferson County, West Virginia and the surrounding area. This pollution will endanger waters of the state including the groundwater and surface water resources of Jefferson County which are particularly vulnerable due to the hydrogeologic setting. The Rockwool facility's planned

PO Box 460, Ranson, WV 25438
 Jefferson County Foundation, Inc. is a 501(c)3 Non-Profit organization.

activities threaten the drinking water of tens of thousands of people in Jefferson County, Maryland, and Northern Virginia as well as the water quality of the Chesapeake Bay.

For example, Rockwool plans to release pollutants to the air which will fall to the ground and threaten local waters. Rockwool's air permit to construct a stone wool insulation manufacturing plant (R14-0037, April 30, 2018), issued by WVDEP's Division of Air Quality, allows for Particulate Matter less than 2.5 microns, 133.41 tons per year (TPY); Particulate Matter less than 10 microns, 153.19 TPY; (total) Particulate Matter, 250.87 Tons Per Year; Sulfur Dioxide, 147.45 TPY; Oxides of Nitrogen, 238.96 TPY; Carbon Monoxide, 71.40 TPY; Volatile Organic Compounds, 471.41 TPY; Sulfuric Acid Mist, 16.37 TPY; Total Hazardous Air Pollutants, 392.59 TPY, Greenhouse Gases (CO₂e), 152,935 TPY, and classifies the Rockwool Ranson site as a Major Stationary Source of air pollution subject to New Source Review and Prevention of Significant Deterioration (PSD).

Rockwool's air modeling suggests that the bulk of the dust and particulates will fall out and be deposited within the plant boundaries on building roofs, asphalt surfaces, parking lots, roads, and vegetated areas within Rockwool's drainage¹. For example, the PSD modeling result is that the Significant Impact Area for PM₁₀ maximum concentrations is within a circle, centered on the facility, and extending only 0.45 miles to 0.78 miles. That means the majority of the PM₁₀ will fall within the fenced portion of the plant, as can be seen in Exhibit A, in which the AERMOD modeling runs show the spatial concentration distribution of pollutants that exceed the Significant Impact Level (SIL) for PM₁₀ at the 24-hour NAAQS standard (exhibit A1) and the annual NAAQS standard (exhibit A2). The modeling runs show that the maximum PM₁₀ concentrations (in ug/m³) will occur almost entirely within the outlines of the Rockwool facility². This indicates that, by mass, there will be significant outfall of PM₁₀ pollutants on the drainage areas going to the two sediment ponds. Stormwater that falls on these surfaces will entrain the hazardous particulates and dust and convey them to the stormwater and bioretention ponds and outlets. In the case of Rockwool these particulates and dust are in fact hazardous.³ Entrained particulates and dust—due to the toxic nature of the underlying contaminants—has the potential to negatively impact groundwater and surface water. As stated on their application for Multi-Sector permit registration, Rockwool's site will generate a discharge of 86,330 gallons per day (GPD) from Outlet 1 and 10,207 GPD from Outlet 2. Thus the stormwater runoff from the Rockwool facility will contain a significant amount of pollution.

In addition, many of the processes described in the air permit generate fugitive (uncontrolled) emissions. For example, the air permit allows for an outdoor process called the melting furnace portable crusher. The crushing activity will occur outside in a dedicated area that is uncovered, B170. Material that is crushed will drop into a waste pit. Notably, the portable crusher operation is entirely uncontained and uncontrolled by any pollution control devices. This

¹Table 4.1 Summary of Facility Impacts and SIL/SIA Analyses, pp. 35-36, ROXUL Air Quality Modeling Report 12-18-2017.pdf

² Attachment 4, AERMOD Concentration Plots, Appendix C, ROXUL Air Quality Modeling Report, Dec. 18, 2017

³ "Mineral fiber emissions were conservatively assumed to be equal to Filterable Particulate Matter emissions... The listed Hazardous Pollutant (HAP), fine mineral fibers, includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral-derived fibers) of average diameter one micrometer or less." from the Roxul Application for Permit to Construct, Nov. 20, 2017

crusher is a significant source of dust and fugitive particulate matter, the third highest source after the two cooling towers. Fugitive dust and particulates generated via Rockwool's many processes may contain formaldehyde, menthol, phenol, silane coupling agents and other hazardous substances. Best Available Controlled Technology (BACT) limits imposed on the crusher are limited to operational time limits (540 hours/year). The EPA noted in its comments on the air permit "It is the EPA's understanding that limiting hours of operation, or limiting throughput is generally not considered BACT."⁴ Rockwool plans to bring the crusher on-site at least quarterly in order to crush waste for re-melting in the furnace. The material that is crushed is of unknown composition, but will likely include: slag waste from aluminum manufacturing, fine coal dust, coal ash, carbon anode waste (possibly including heavy metals such as molybdenum). This material both before crushing and after crushing will be stored in an open top location, subject to rain. It is difficult to determine if this area is gravel or concrete as it appears to be labeled gravel in several site maps (Exhibit B). The leachate from this storage pile may contaminate groundwater.

In addition, the apparently planned mixture of process water with stormwater water, to be held in on-site ponds, threatens local waters. Pollutants produced by the manufacturing process at the Rockwool Ranson facility are captured in process water, which currently available information indicates can then mix with stormwater, with the resulting mix retained in open ponds. These pollutants are not permitted to be removed via the sewer system to Charles Town Utility Board (CTUB) wastewater treatment plant. The WV/NPDES permit No. WV002349 Modification No. 8, which is the modification of the CTUB NPDES permit that allows CTUB to accept Rockwool's effluent, specifically states the following:

"The permittee may accept non-domestic wastewater from Rockwool (IU02) for treatment and disposal at the Charles Town's main wastewater treatment plant (design flow of 1.75 MGD). The non-domestic wastewater approved for acceptance consists of RO reject wastewater and water softener wastewater from the treatment of finished drinking water from Jefferson Utilities, Inc. The maximum daily volume accepted shall not exceed 17,000 gallons per day. The actual volume of the non-domestic wastewater accepted shall be measured and recorded daily. The acceptance of any other non-domestic wastewater is prohibited."⁵

Therefore, only domestic sewage, reverse osmosis (RO) reject wastewater, and water softener wastewater from the treatment of finished drinking water is permitted by WVDEP to be discharged to the CTUB sewer system. The CTUB sewer system is the only sewer system that is currently permitted to take effluent, domestic or industrial, from the Rockwool Ranson plant. In addition, the discharge of any amount of stormwater to the CTUB sewer system is specifically prohibited in the permit.

In a letter dated November 26, 2019 from the plumbing engineer retained by the Charles Town City Council, Mr. Christopher M. Echenrode, P.E. Senior Project Engineer of Gwin, Dobson, and Foreman Engineers, to Mr. Hennessy, the city manager of Charles Town, Mr. Echenrode

⁴ EPA Comments on Draft Permit Number R14-0037-00108 ROXUL USA, Inc., April 25, 2019.

⁵ WV/NPDES Permit No. WV0022349 Modification No. 8, Modification 1.

posed 18 questions and comments about the internal plumbing plans of the Rockwool facility that he had been asked to evaluate. The eleventh question was as follows.

“Where are the proposed ‘process water’ lines being returned? Why are floor drains and trench drains connected to the ‘process water’ lines and not the sanitary sewer? It was noted that the ‘process water’ lines are accepting the downspout flow. Does the system have sufficient storage capacity to handle heavy rain events? Please confirm if any ‘process water’ enters the sanitary sewer system.”

These questions were answered in a letter to Mr. Hennessy dated December 13, 2019 by Daniel Ferrell, P.E. Principal in Charge of the Thrasher Group, Inc. the engineering firm hired by Rockwool. The answer to the above question was as follows:

“RESPONSE: All ‘process water’ is collected, treated and used within the production building via the closed loop system within the manufacturing process. All floor drains and trench drains are connected to the process water system to maximize water usage efficiency and eliminate any potential discharge of unwanted flows outside of production areas... It can be confirmed that the process water system is closed loop with no effluents and/or interconnections to the sewer system.”

In fact, however, this system is only closed loop in that no effluent from the process water enters the sewer system. In contrast to what is stated in the above excerpted quote, as shown on the plumbing plans, the process water enters the storm drain system, and drains into a settling pond (exhibit C). From the settling pond, it flows over a weir into an open retention pond where it is held until drawn back into the process area via a pipe and pump station. While in residence in the retention pond, volatile organic compounds (VOCs) such as formaldehyde, phenol, and methanol carried within the process water steam are emitting into the air and potentially leaking into the groundwater. The solid particulate pollutants carried into the basin are expected to settle from the water in the settling basin and get scooped out of the settling basin with heavy equipment to be reincorporated back into the process.

An example of this loop can be followed starting on plan page PA0201.1 and PA0201.2 (Exhibit C). One can see that the process water from multiple floor drains and a trench drain enters a filter then enters a pipe labeled storm drain. On plan page PA0201.2, it is seen that process water exits the manufacturing process and the process area via the pipe labeled storm drain and presumably mixes with stormwater as the label for the pipe implies. Plan page P0206 shows these storm drains exiting the building. Plan pages 000-024 and 000-015 show these storm drains (red dotted line) entering the storm drain system and draining into the settling pond.

This demonstrates that process water and stormwater are combined and retained in open ponds. As no process water is permitted to leave the site via the sewer system, this loop system is the reservoir for all pollutants not exiting the system via pond evaporation or through the smoke stacks.

This is a novel system not used previously by Rockwool. Rockwool in Mississippi has a pretreatment facility and its process water is treated at that facility and disposed of via sanitary

sewer. It is not a system which is used by any other mineral wool manufacturer in the state of West Virginia, or in the United States for that matter. This system poses several severe risks of marked pollution of the groundwater aquifer (considered water of the state in West Virginia) in Jefferson County, risks made much worse by the unique hydrogeological features of Jefferson County. This is of substantial and valid concern as a majority of the residents of Jefferson County depend on groundwater as their only source of water.

2. **Rockwool should also be required to obtain an individual permit due to the unique hydrogeologic setting and associated vulnerability of groundwater resources in the area in which Rockwool Ranson plans to operate.**

Rockwool and its the rainwater for reuse pond, are in extreme proximity to the ground water aquifer and, therefore, to the waters of the state. There are several other relevant factors including the unique hydrogeologic setting, and high aquifer vulnerability in this location. Further, if the ground water is contaminated in this location, tens of thousands of people stand to be affected in Jefferson County, Northern Virginia, and Maryland, as well as the water quality of the Chesapeake Bay. Therefore, Rockwool should be required to obtain an individual permit. (47CSR10 Section 13.4.c.2.A. and 13.4.c.2.D)

It is easily ascertainable that the Rockwool Ranson facility is sited on karst geology.⁶ Despite this information being readily available, when originally permitting the Rockwool facility the Site Selection Criteria (West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.10) were not followed. "Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s), subsidence, or delineated wellhead protection areas, as determined by the Bureau of Public Health. If areas of karst, wetlands, fault(s), subsidence, delineated wellhead protection areas or other areas determined by the director to be vulnerable based on geologic or hydrogeologic information, are determined to exist, then the facility or activity design must adequately address the issues arising from locating in the area(s) of a potentially more vulnerable groundwater resource." (See Exhibit D.) This facility should never have been permitted to be located on karst. And Rockwool clearly failed to describe the karst underlying its facility and its understanding of the risks associated with the presence of karst in its original 2017 stormwater construction permit application.

A karst landscape is characterized by the presence of sinkholes, springs, caves, ridges and sharp projections in the underlying bedrock, and highly irregular soil-rock interface. The karst landscape is a consequence of the presence of soluble bedrock, which consists of limestone in the case of Jefferson County. In such landscapes water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways. Karst aquifers are known to be "extremely vulnerable to pollution," due to direct connection between the surface

⁶ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. Carbonates and evaporites. 2012 Jun 1;27(2):143-52.

Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. Field Guides. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In Sinkholes and the engineering and environmental impacts of karst 2008 (pp. 12-22).

and underlying high permeability aquifers.⁷ The groundwater at the Rockwool site is only 60 feet below the ground.⁸ However, at the locations of the water reuse pond and the stormwater pond, large amounts of earth have been removed, meaning the groundwater is even closer to the contents of the pond than 60 feet.⁹

The Rockwool site is on a karst feature known as an “Arabian plain.” This is an upland area with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. This water is easily contaminated and the springs at the margins of the Arabian plain are directly affected by the water quality throughout the aquifer (Exhibit E). It is known from several dye studies that this water flows and diffuses relatively quickly. This is significant as the majority of Jefferson County residents depend on wells for water. The exact number and location of wells in Jefferson County is unknown, because Jefferson County did not have a consistent record of wells until county ordinances were created in 1980. Many of the wells most vulnerable to contamination of any type are those wells built before 1980, which are shallower and have inconsistent construction that makes them prone to inflow. The water in the epikarst at the Rockwool site will affect the drinking water of a majority of Jefferson County residents.

In a dye test performed by the USGS in 1988 and 1989 it was found that the water from just adjacent to the Rockwool site emerged in the headwaters of both the Elk’s Run and Rattlesnake Run¹⁰ (Exhibit F). The Elk’s Run headwaters is a spring about three miles south east of the Rockwool site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Exhibit F). The headwaters of Rattlesnake Run is a spring about 3.5 miles from the Rockwool site and is also a tributary of the Potomac River. These are just two examples of the examples the dye test demonstrated, of how the groundwater at the site communicates with and affects the surface waters in the county.

The Rockwool facility is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. In fact, Jefferson County has 25 watersheds that empty either directly into the Potomac or into the Shenandoah before it joins the Potomac River. **In this way, the surface waterways of Jefferson County have a direct effect on the Chesapeake Bay and as such are required to adhere to Chesapeake Bay watershed-wide federal requirements.**

Through both the groundwater aquifer and Rocky Marsh Run, the activities at the Rockwool facility have the potential to affect the drinking water of the great majority of Jefferson County

⁷ Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. *Earth-Science Reviews*. 2014 Nov 1;138:61-88.

Ford D, Williams PD. *Karst hydrogeology and geomorphology*. John Wiley & Sons; 2013 May 3.

Zhou W, Beck BF. Engineering issues on karst. In *Karst management 2011* (pp. 9-45). Springer, Dordrecht.

⁸ Carpenter DL, Connelly DT, M Innis. Project Shuttle, Site Characterization Report VRP (Volunteer Remediation Plan) Parcel Jefferson Orchards Site. Environmental Resources Management. 2017 Sept.

⁹ *Id.*

¹⁰ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area*, US GEOLOGICAL SURVEY, 1991

residents, but also through its effects on the tributaries of the Potomac River, the drinking water of Northern Virginia and Maryland, and the Chesapeake Bay.

For decades now policy makers have been using “Aquifer Vulnerability” measures, of which karst is very high, to set land use and water resource protection policy.¹¹ The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document *Stormwater Management Design in Karst Areas* states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”¹²

Further, Karst is known to have “severe ground instability problems”¹³. This makes the “aquifer vulnerability” in karst areas very high¹⁴. This also makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater.

The Rockwool site is located in the area with the largest sinkhole density in Jefferson County (Exhibit G).¹⁵ Furthermore, a study demonstrated that in this area, several factors increased the rate of sinkhole development and these included presence of surface water and development (see footnote 13). Again, the WVDEP guidance documents agree. The Chesapeake Bay karst stormwater guidance document¹⁶, which WVDEP cites in the *Stormwater Management Design in Karst Areas*¹², clearly states that detention and retention ponds are not recommended on karst. Quoting WVDEP’s own karst guidance: “attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Therefore, just by virtue of disturbing the ground on the site and creating ponds as Rockwool is doing, Rockwool has a high potential to actually increase the rate of sinkhole development. In Rockwool’s own geotechnical investigation report prepared for Thrasher Engineering by Specialized Engineering, it states the following:

¹¹ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

¹² Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4

¹³ Doerfliger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). *Environmental Geology*. 1999 Dec 1;39(2):165-76.

¹⁴ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

¹⁵ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.

Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. *Field Guides*. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).

¹⁶ CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009

“Some sinkholes failures can be induced by construction activities and are of significance because the sinkholes can directly affect the site being developed, either immediately or some years later. Construction activities that can trigger sinkholes include 1) diversion or impoundment of drainage or dewatering activities, 2) removal of overburden cover, 3) shock vibrations, such as blasting, and 4) increased loading.

Prediction of sinkhole location or occurrence is difficult, if not impossible, and there is always a significant degree of uncertainty associated with the occurrence of future sinkholes. Structures built within the area of influence of a sinkhole can also be affected by sinkhole collapse or subsidence.

By virtue of the underlying geologic formation, the Owner must acknowledge there is an inherent risk of potential ground subsidence or collapse associated with construction of structures in karst terrain. All sites in karst terrain have the potential for sinkhole formation. **Specialized Engineering can provide no warranties or guarantees regarding future sinkhole or subsidence conditions.**¹⁷

In direct contradiction of all of this guidance, Rockwool built several retention ponds, and multiple concentrating swales and ditches. Furthermore, according to site map 16B (exhibit H) Rockwool chose to build two retention ponds far larger than is recommended on karst and several swales in the most sinkhole-vulnerable location on their property.

As of September 2019, there were at least 17 sinkholes on Rockwool’s site as can be seen on the site map (Exhibit I). Sinkholes anywhere on Rockwool’s property pose a risk of groundwater contamination. As noted previously, a majority of the particulate matter from the steam stack is expected to fall within the bounds of the Rockwool property and be entrained in rainwater that may enter such sinkholes along with any other ground level contaminant that may be present.

Unfortunately however, most of the sinkholes have been inside of stormwater ponds, with seven sinkholes appearing in Rockwool’s rainwater reuse pond during construction (Exhibit I). This poses an alarming possibility. The rainwater reuse pond is the reservoir for all of the pollutants produced at Rockwool and this structure developed at least 7 sinkholes during construction alone. In light of this, one can easily see a scenario where a sinkhole develops in the rainwater reuse pond and leads to catastrophic contamination of the groundwater aquifer in Jefferson County. This would affect the drinking water of tens of thousands of people in Jefferson County, and through its direct effects on the surface waterways and the Potomac River the drinking water of Northern Virginia and Maryland and the Chesapeake Bay.

Rockwool’s proposed stormwater pond design is inadequate and inappropriate for karst terrain, especially at this critically sensitive location. Rockwool’s sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes

¹⁷ Project Shuttle -New Industrial Site at the former Jefferson Orchard Kearneysville, Jefferson County, West Virginia Specialized Engineering Project No. 177164, Specialized Engineering 4845 International Blvd, Suite 104 Frederick, MD 21703, July 11, 2017

open under them. In fact, there is a whole field of study into detecting sinkhole development, void development, and earth movement under such liners.

The pond liners Rockwool is using pose several issues. First, they have one layer of 60 mil HDPE liner. It is recommended to have two layers. Sixty mil is also the minimum thickness recommended in the Stormwater Pond Design Guidelines. Because the pond is so large (estimated 72,000 square feet) there will be 3,600 linear feet of on-site welded joints. These joints are the weakest part of the liner and the most likely to fail. Rockwool's HDPE membrane was field fabricated with thousands of feet of welds required to join the rolls of material together. The welds were made in the dirty unconditioned field and are sure to fail due to poor workmanship, cracks, and the unstable soil below. If a large sinkhole opens below the pond, there will likely be catastrophic failure at joints of this liner.

Under this liner, there is a quarter of an inch thick geosynthetic clay layer, and again, there are joints in this layer as well. This is the weakest part of this layer and most likely to fail. This layer is over a geogrid liner, which allows liquids to pass freely through it. Under this are four inches of compacted barrow clay, however the Chesapeake Stormwater Network Technical Bulletin recommends 24 inches of soil or clay. There is no leak detection system shown in the IEP, nor is there a detection system for sinkhole formation. Therefore, although the ponds have three layers of material, only one, the HDPE membrane is designed to prevent liquids to pass through.

The Fabricated Geomembrane Institute recommends a *Double Composite Liner System* where there is potential for groundwater contamination. That system consists of a Primary Geomembrane layer; Geosynthetic Clay Liner/Compacted Soil; Drainage/Witness Layer and a Secondary Geomembrane over Compacted Soil. The Double Composite Liner System provides the best approach to prevent leakage of contaminants from the ponds into the groundwater. No liner system can prevent the catastrophic failure of the system caused by sinkholes opening under the ponds.

A simple search of peer reviewed literature reveals a plethora of information highlighting the risks associated with development in karst geology and many techniques for studying the impact of development on such land. It does not appear as though the municipality of Ranson employed any of these methods when it incorporated or rezoned this area. However, this oversight or lack of due diligence by Ranson does not absolve the WVDEP of its responsibility and liability to protect the water resources. Such a search will also reveal many techniques and methods for designing best strategies for limiting risk in a karst area. It does not appear as though Rockwool employed any of these techniques or guidelines. It seem catastrophic failure of a liner and the contents of the basins escaping into the groundwater resource may be the only way that Rockwool will know a sinkhole has formed under one of its sediment basins.

3. Rockwool's methods are unlike other mineral wool facilities in West Virginia and thus require an individual permit to appropriately protect the waters of the state.

The current Multi-sector Stormwater Permit will not do enough to protect the groundwater and surface water resources of Jefferson County and the region. As you know, a general permit is an NPDES permit that covers multiple facilities that have similar discharges and are located in a

specific geographic area based on the permit writer's professional knowledge of those types of activities and discharges. Whereas, an individual permit is written to reflect site-specific conditions of a single discharger based on information submitted by that discharger in a permit application and is unique to that discharger.

Rockwool's method of manufacturing mineral wool insulation is unique and bears little resemblance to methods used by either Knauf or Armstrong, the other two mineral wool manufacturers in West Virginia. Knauf, located in Inwood, is only 10 km from Rockwool, but uses an entirely different technology (electric arc in a closed vessel, with little or no process water). The Armstrong facility in Millwood, on the Ohio River, is not only smaller (30,000-square-foot plant on 18 acres), but itself does not have a Multi-Sector General Permit for stormwater management—it was required by WVDEP to obtain an individual NPDES permit.

There are no other mineral wool facilities that have the same process-based or site location-based stormwater concerns as Rockwool. Rockwool is the only North American mineral wool manufacturer to attempt to build a facility on karst and it is using different processes than other mineral wool manufacturers. Rockwool is using an innovative method of rain harvesting to supplement its domestic water use. An individual NPDES permit is thus appropriate for Rockwool due to its location on karst and high potential for groundwater contamination.

Evaluation of current rain harvesting technologies reveals no other large commercial and industrial facilities that have rain harvesting at the scale that Rockwool proposes. Most significantly, all of the large rainwater harvesting examples have closed vessels and tanks, often in series, to store the captured rainwater/stormwater. There is also no other instance of rain harvesting where process-related wastewater flows into and mixes with the captured rainwater/stormwater. Rockwool's hybrid Water Storage & Reuse Pond is unique and has not been tried before, not even at their facility in Byhalia, Mississippi. Due to the first ever use of a Process Wastewater and Rainwater Harvesting system, Rockwool must not be allowed to proceed under a General Permit.

4. The Rockwool facility poses additional concerns and risk factors that can only be addressed adequately under an individual permit.

There are many concerns at the Rockwool facility that should and could be addressed if Rockwool were required to have an individual permit. These are also relevant factors in determining the risk to the waters of the state from Rockwool and therefore Rockwool should be required to obtain an individual permit. (47CSR10 Section 13.4.c.2.D)

4.1 Inappropriate Pond Design for Karst Geology

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. However, it is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development, and earth movement under such liners. In an effort to prevent disaster, Rockwool should be required to

install the latest technology in and beneath the liners for its stormwater pond.¹⁸ In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner leakage.

In the Chesapeake Stormwater Network Technical Bulletin No. 1, a guiding document cited by the WVDEP, it gives the following general principles that should be considered in site layout and design of stormwater systems in karst.

1. Any existing sinkholes and karst swales should be surveyed and permanently recorded on the property deed or plat. In addition, an easement, buffer or reserve area should be identified on the development plat for the project so that all future landowners are aware of their presence.
2. Minimize site disturbance and changes to soil profile, including cuts, fills, excavation and drainage alteration, near karst features.
3. Sediment traps and basins should only be used as a last resort after all other erosion and sediment control options have been considered and rejected. In the rare instance they are employed they should serve small drainage areas (2 acres or less) and be located away from known karst features.
4. Designers should place a high priority on preserving as much of the length of natural karst swales present on the site to increase infiltration and accommodate flows from extreme storms
5. Treat runoff as sheet flow in a series of small runoff reduction practices before it becomes concentrated. Practices should be designed to disperse flows over the broadest area possible to avoid ponding, concentration or soil saturation.
6. The use of centralized stormwater practices with large drainage areas is strongly discouraged even when liners are used.
7. Centralized treatment practices require more costly geotechnical investigations and design features than smaller, shallower distributed LID practices.
8. Designers must address both the flooding and water quality aspects of post development stormwater runoff. In most localities, the sequence of stormwater practices should have the capacity to safely handle or bypass the 2- and 10- year design storm, following the methods outlined in Section 5.4.
9. Designers should maintain both the quality and quantity of runoff to predevelopment levels and minimize rerouting of stormwater from existing drainage.

None of the above principles were followed in the case of Rockwool. In an individual permit, these and all of the recommendations in the Chesapeake Stormwater Network Technical Bulletin No. 1 need to be followed.

¹⁸ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ.

Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

In the case of principle number 1 above, the Multi-Sector General Permit requires a topographic map be provided that extends at least a mile beyond Rockwool's property that shows the following: all intakes and discharge structures, sinkholes, drinking water wells, springs, and surface water bodies. Rockwool's topographic map and site map are deficient. There are several of these features within one mile that are not shown, including 8 known in-use drinking water wells, 12 total wells, sinkholes, and documented wetlands. Rockwool falsely claims there are no wetlands.⁸ Mountaineer Gas Company did an extensive karst inventory of sinkholes prior to installing the natural gas pipeline and those sinkholes are also not discussed or depicted on any maps in the IEP or the General Permit application. Outlet #1 and #2 discharge to a field in the northern area of Rockwool's property; it is unclear from the topographical map if there are sinkholes in this area. These deficiencies in the topographical and site maps must be corrected and accounted for in the design of the stormwater plan. Another deficiency that will need to be corrected is the inappropriate design and location of outlets. An example of such faulty location of outlets is that there appears to be a sinkhole close to the location of the level spreader for the stormwater outlet #1 and #2. If this is the case, discharge from outlet #1 and #2 may make this sinkhole worse and lead to groundwater contamination with surface water.

In table 3 of the Chesapeake Stormwater Network Technical Bulletin No. 1, it says that wet ponds are discouraged, need liners and may require a UIC. They go on to say, "use of wet ponds in karst terrain is highly restricted, because of **frequent recurring failures** due to sinkhole formation." It says, at a minimum, there must be six feet of unconsolidated soil material between the bottom of the basin and the top of the bedrock layer. The maximum temporary or permanent water elevations with basins do not exceed six feet. There must be inspections for sinkholes and they must be reported and addressed immediately. A liner must be installed that meets requirements they set forth in their Table 6 (Exhibit J).

A pond—even a lined one—is simply not appropriate for the rainwater reuse pond, as this pond holds stormwater admixed with process water and serves as a reservoir for pollution. The recommendations and warnings are clear from the guiding documents of the WVDEP to the warning from Specialized Engineering (the firm engaged by Thrasher Engineering to evaluate Rockwool's Ranson site) -- failure of a wet pond in karst—even an optimally lined one—is eventual. This would leave the groundwater and surface water, including the Potomac and Chesapeake, at great risk. Therefore, the contents of the rainwater reuse ponds should be stored in above ground closed vessels that are appropriate for the contents, and monitored appropriately for deterioration. The design of the stormwater ponds should be modified to be in accordance with the recommendations from the guiding documents of the WVDEP. Any ponds that are used should be lined and have a multimodal detection system for both leaks and sinkhole development. This can be addressed in an individual NPDES permit.

The WVDEP approved Rockwool's sinkhole mitigation procedure in 2018. First, the sinkhole mitigation procedure allows too much time to pass between the identification of a sinkhole and when it needs to be repaired – time that allows for possible drinking water contamination. The WVDEP should require reporting within hours of noting the sinkhole, and emergency intervention to happen within 24 hours. The WVDEP should directly oversee these repairs. Each

sinkhole should be evaluated to ensure the optimal remediation procedure is employed.¹⁹ There is no contingency for addressing any new sinkholes, which might open up, nor any discussion of inspecting swales, ditches, or ponds related to the stormwater management to check for new sinkholes. Rockwool has already been cited on September 9, 2018 with a notice of violation in six areas, including failure to report a sinkhole. There needs to be the guarantee of a significant fine for future non-compliance, especially regarding sinkholes. Again, it seems that the only way Rockwool will know they have a problem is when there is catastrophic failure. As mentioned previously, Rockwool should be required to have a multimodal detection system for sinkhole development.

The WVDEP director can and should require Rockwool to perform routine groundwater monitoring. It is unacceptable that Rockwool has not included this in its plans. With regard specifically to outside material storage and disposal areas, and impoundments, for industrial facilities, West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that “placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring,” and “groundwater monitoring stations may be necessary to assure protection of the groundwater resource.” Given the information cited previously about the sinkholes on site and our sensitive groundwater resources, WVDEP should require regular and frequent monitoring and reporting of groundwater. This can be required in an individual NPDES permit.

4.2 Buried Utilities

Rockwool failed to inventory and discuss its existing underground pipelines in the Multi-Sector General Permit application. Applicants are required to provide an inventory of all “operations, which may reasonably be expected to contaminate groundwater resources.”²⁰ The following potential sources are specifically listed: Outside materials storage areas, Disposal areas, Loading and unloading areas, Bulk storage and distribution areas, Drums, Sumps, Pumps, Tanks, Impoundments, Ditches, and Underground Pipelines. Rockwool specifically and falsely states that it has zero underground pipelines when, in fact, Rockwool has at least two underground pipelines, including a natural gas pipeline and a liquid oxygen pipeline.

Both the natural gas pipeline and the liquid oxygen pipeline run directly through the area for greatest risk of sinkhole development on the property (Exhibit K). The natural gas pipeline runs between the furnace side of the building and both the Sediment Pond and the Water Reuse Pond, within 10 feet of the stormwater discharge outlets. Rockwool’s liquid oxygen runs from the oxygen tanks that sit immediately south of the Stormwater Pond, under the perimeter road and on to the furnace building. This is not an inconsequential fact. As described previously, due to the

¹⁹ Zeng Y, Zhou W. Sinkhole remedial alternative analysis on karst lands. *Carbonates and Evaporites*. 2019 Mar 5;34(1):159-73.

Zhou W, Lei M. Conceptual site models for sinkhole formation and remediation. *Environmental earth sciences*. 2017 Dec 1;76(24):818.

Huckert A, Garcin P, Villard P, Briançon L, Auray G. Experimental and numerical approaches of the design of geotextile-reinforced embankments prone to sinkholes. In *10th International Conference on Geosynthetics 2014 Sep 21 (Vol. 21)*.

²⁰ West Virginia National Pollutant Discharge Elimination System Multi-Sector General Water Pollution Control Permit, Number WV0111457, issue date September 12, 2019, pg. 37

karst geology, these pipelines are at particular risk of damage leading to groundwater contamination or explosion and catastrophic damage. Underground oxygen piping is also particularly vulnerable to damage by lightning, which may ignite the pipe material.

Pipeline ruptures and explosions have occurred all too often as a result of the failure to monitor pipelines for corrosion or cracks. Rockwool has failed to identify any plans for pipeline monitoring. Such plans should be identified and included in any permit, and monitored by the WVDEP to ensure proper oversight and maintenance. The underground pipelines and their proximity to the stormwater ponds and conveyances, as well as monitoring for corrosion and pipeline integrity, should be addressed in an individual permit.

4.3 Other Facility Design, Control, and Operations Stormwater Management Concerns

The section of the IEP Facility Design, Control, and Operations, it states “storage of solid waste or recycled material is constructed with an appropriate concrete surface that is chemically resistant to waste or recycled material. Liquid is not stored in designated solid waste or recycled material areas and containers that are outside have cover lids. The collection system is connected to the process water system and does not discharge to the stormwater outfall.”²¹ The solid waste area needs to be lined, in addition to a ‘concrete surface that is chemically resistant.’ This will come into contact with liquid as it is uncovered and is the destination for dewatered sludge from other ponds. These areas have not been evaluated and must be addressed along with the storage of waste products, by-products, and materials destined to be recycled. It is possible that the Resource Conservation and Recovery Act (RCRA) should apply here. This issue needs to be specifically addressed, including an analysis of whether RCRA applies to these waste storage activities; and, if so, whether proper regulatory action has been taken. In addition, Rockwool states that they will generate a waste sludge consisting of spent sulfur dioxide-removal pollutant control chemicals. They say that this material will be stored in a silo and then shipped offsite. As such material is often caustic and may entrain toxic chemicals, it will need to be evaluated as a potential hazardous waste. At the very minimum, Rockwool must obtain a RCRA generator number and be in the state and federal RCRA tracking system.

WVDEP guidance for stormwater controls says it **requires** “the employment of mitigating practices to eliminate potential contaminants from reaching the stormwater structure.” Admixed process water and stormwater enter the settling pond, which is a concrete lined forebay to the rainwater for reuse pond, via a 48-inch pipe (exhibit C). The water remains in residence there for some period of time before flowing over a weir into the rainwater for reuse pond. During this residence time, some material settles out of the water. Over time, this builds up in this concrete lined pond. This material is periodically removed using heavy equipment. How will it be ensured that this material is not spilled outside of the concrete lined pond? Just to the south of this settling pond, there is a swale that leads to the stormwater outlet #1 (Exhibit L). If material from the pond is spilled here during clean out of the settling pond, then it will contaminate the stormwater outlet with process materials. This is inappropriate. There should be secondary containment to prevent process materials from entering stormwater in this location. Using closed

²¹ Rockwool IEP submitted with the General Multi-sector Application, section 5.2 Facility Design, Control, and Operations. 2019 pg22.

vessels for the admixed rainwater process water storage would also solve this. This could be addressed in an individual NPDES permit.

The water in the rainwater for reuse pond is drawn back into the process via a pump inlet and pump station (Exhibit M). How will leaks at this liner penetration point be prevented? This needs to be addressed.

The IEP describes how the rainwater reuse pond is sized for a 100-year rain event, and in the event that it is approaching capacity due to a large storm event, Rockwool can store and treat the water. "For example, RAN5 could employ water tank trucks to haul off water to be treated at a designated publicly owned treatment works [POTW]." It is unclear which POTW they are referring to. If it is Charles Town, this should have been described in the NPDES modification that was approved on March 1, 2019. Since it was not described, it should not be allowed by the Charles Town Utility Board (CTUB). This is too serious a risk to not be specifically addressed. Rockwool must amend its application to identify what is the trigger for the preparation for a "heavy rain event," where are the water tank trucks going to come from, if the trucks are contracted, how will Rockwool ensure that they are actually available when needed, how will it ensure that the drivers and operators of these water tank trucks are actually properly qualified to be handling contaminated water, and most importantly, where will these trucks dispose of the contaminated water? What location has agreed to take such water? This could be addressed in an individual NPDES permit.

Rockwool should be required to test the contents of each tanker truck before it is hauled away, to ensure no hazardous materials are mixed with rainwater, and that the trucks are not then contaminated for further water hauling. This should be further evaluated and well defined in the Rockwool permit application. This could be addressed in an individual NPDES permit.

In the most recent publicly available version of the internal plumbing plans of Rockwool (12-13-19) on sheet PA0201.2 there is a sump pit in building number 135 (Exhibit C 10). The label states "Pump piping up and out of pit. Flow has 2 options valve with pipe to outside for release outside or valve with hose connection for a local tote." In the letter to Mr. Hennessy dated December 13, 2019 by Daniel Ferrell, P.E. Principal in Charge of the Thrasher Group, Inc. the engineering firm of Rockwool referenced above, he states:

"For ease of construction, water from this sump will be tied into process water system. For clarification, there are no sumps connected into sewer system. Further clarification can be provided that as per the note indicated on PA021.2 that these sumps are monitored and controlled by plant operator. If the plant operator determines there will be no negative impact, the sump discharge will enter the storm system. This will only occur after the plant's operator evaluates the discharge."

Where does this discharge go when it is "released outside"? How does the operator evaluate the discharge? Is this an unpermitted discharge? This needs to be addressed and appropriate protocols developed for evaluating the discharge need to be put in place and an appropriate discharge location be determined and designated. This can be done in an individual permit.

4.4 Groundwater Protection Plan and Monitoring

A great majority of the households and agricultural businesses in the area surrounding the Rockwool Ranson facility depend on groundwater. If the groundwater were to be fouled, it would devastate Jefferson County and surrounding regions' equine and agricultural industry, and therefore, our economy. It would saddle our local government with restoration cost and legal cost as citizens seek restitution. It would be a major burden to households who will be forced to find alternate, undoubtedly more expensive, sources of water. We have repeatedly seen this play out across our state as the consequences of previous industrial and extractive activity manifested. Here, we have the chance to prevent such devastatingly negative consequences. We are counting on the WVDEP to protect the groundwater we depend on in Jefferson County.

The Multi-Sector application, section 19, requires a Groundwater Protection Plan (GPP), either standalone or in combination with a Stormwater Pollution Prevention Plan, and each must be certified. As provided its IEP, Rockwool's description of groundwater data is woefully incomplete and demonstrates a cursory analysis of what is truly a foundational concern. The WVDEP guidelines for successful Groundwater Protection Plan list the groundwater analysis, data, and other related information that should be included. While Rockwool mentions it exists, it barely addresses it. As described in West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.11, "Each industrial establishment shall have a comprehensive groundwater protection plan (GPP). Each GPP shall contain the following:" Among many elements, the following is listed: "A discussion of all available information reasonably available to the facility/activity regarding existing groundwater quality at, or which may be affected by the site." Previous groundwater data and monitoring are easily available from extensive USGS and county research, yet Rockwool doesn't describe them. Rockwool also fails to describe the geophysical testing done in 2017.¹⁷ The narrative references groundwater data that are included in a table in the appendix, but the appendix section is incorrectly titled, the table has no descriptive text, and does not even label the units of measurement, rendering it useless.

As cited in the sinkhole section previously, there are published studies that are applicable to the Rockwool site and sinkholes. A USGS study used dye tracer tests to determine rates and directions of groundwater flow within the karst aquifer. Dye was injected into a sinkhole in Shenandoah Junction, about a mile from Jefferson Orchards. Two weeks later, the same dye was detected at a monitoring point north of Shepherdstown. Within 20 weeks, it was detected at an additional 5 sites between Kearneysville and Shepherdstown. The study reported movement of up to 840 feet per day – which indicates that contamination can happen quickly. This sort of information is in fact "reasonably available to the facility" and should have been included and considered, and would be able to be in the context of an individual permit.

The director of the WVDEP can and should require Rockwool perform routine groundwater monitoring. West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that groundwater monitoring stations may be necessary to determine if contamination is occurring or has occurred, and also to "assure protection of the groundwater resource." In section 4.9.c. it goes on to say, "new facilities shall monitor groundwater upon order of the director if the director reasonably believes that an industrial establishment or activity has the potential to contaminate groundwater." Page 69 of the WVDEP stormwater management guidance document states, "monitoring wells and groundwater sampling may be required by the

director for the assessment of the potential for or existence of groundwater contamination.” It is reasonable to believe Rockwool has the potential to contaminate groundwater, and monitoring for groundwater contamination should absolutely be required in Jefferson County. Given what we know about the sinkholes on site and our sensitive groundwater resources, and knowing that at least 70% of the people in this county drink well water, the WVDEP should require frequent monitoring and reporting of groundwater. This should be addressed with an individual NPDES permit.

4.5 Inappropriate Description of Pond and Site Runoff Design

Rockwool states, “the outfall discharges water onto an outlet apron during discharge to maintain non-erosive discharge velocities.” The outfall apron needs to be better described and monitoring parameters with action trigger points need to be defined to prevent erosion and sinkhole formation. This could be addressed in an individual NPDES permit.

4.6 Rockwool’s IEP Fails to Identify All Outdoor Process Activities

Rockwool’s air permit (R14-0037) describes a “melting furnace portable crusher” as an outdoor process. This process is a significant source of dust and fugitive particulate matter, third only to the two steam stacks. This process is planned at least quarterly. BACT limits imposed on the crusher are limited to operational time limits (540 hours/year). The EPA pointed out that this was inadequate for BACT on this process, in its comments on the air permit⁴. The air permit describes this process as occurring in a dedicated area that is uncovered, B170. Therefore, B170 is also a materials processing area in addition to a storage area for process-related industrial pollutants as described in a previous section. Again, this area is uncovered, unlined, and about 20 feet from the Water Reuse Pond and Bioretention Basin #2. This outdoor process should be considered in an individual NPDES permit.

4.7 IEP Fails to Address the Potential for Dust and Particulate Contamination of Stormwater Discharges

Rockwool will produce fugitive dust and particulates that may contain formaldehyde, menthol, phenol, silane coupling agents, and other hazardous substances. Several processes generate fugitive dust, including the portable crusher operation mentioned in the previous section. This process is entirely uncontained and uncontrolled by any pollution control devices. In addition, Rockwool’s controlled processes will produce up to 134 annual tons of PM_{2.5} and 154 annual tons of PM₁₀. Air modeling suggests that the bulk of the dust and particulates will fall out within Rockwool’s drainage and be deposited on building roofs, asphalt surfaces, parking lots, roads, and vegetation. The stormwater, which falls on these surfaces, will capture the dust and hazardous particulates contained within and convey them to the stormwater and bioretention ponds and outlets. As a consequence of the toxic nature of the underlying contaminants, these captured contaminants have the potential to negatively impact groundwater and surface water. The effect on water resources has not been evaluated and needs to be addressed. This could be addressed in an individual NPDES permit

4.8 Internal Plumbing Plans Should Be Included in the Application

The IEP shows that the Stormwater Management Pond that drains areas HrC and HeB, which covers parts of the manufacturing facility, discharges to a field north of Rockwool through Outlet #1. This Outlet #1 is expected to have discharge of 86,330 gallons per day. Is all this water in

fact stormwater? Further, in section 4.4.7 of the IEP, it states, “no interior building floor drain is designed for connection to the storm drain system.” However, we know from evaluating the plumbing plans that the process water admixes with stormwater and enter the rainwater for reuse pond.

It appears from site plan sheet 000-015 that process water from some of the buildings enters the storm drain system that enters the stormwater pond that discharges to outlet #1 and the natural environment. The WVDEP must require that the application contain the internal plumbing plans, to determine that no process water from the facility is expected to be discharged into ponds with a discharge to the natural environment. These issues could be addressed with an individual NPDES permit.

4.9 Storage of Unknown Chemical in Close Proximity to Water Resources

Seven of the 13 Aboveground Storage Tanks (AST) on site have undisclosed contents and hold 88,500 gallons of unknown chemicals. If the contents of the ASTs are unknown, there is no way to determine if the ASTs are in compliance with 47 CSR 63 (AST Design Construction and Installation), or if proper and adequate containment is provided. It is impossible to evaluate the application for adequate groundwater protection water resources absent this information. Further, it is reckless to allow unknown industrial chemicals this near stormwater ponds, sinkholes, and water supply protection zones on karst geology.

Additionally, there is no information provided about Rockwool’s plans to monitor and ensure tank integrity. The risk of corrosion, leaks, and vapor releases from storage tanks has resulted in multiple disasters in this country. Rockwool’s permit application must include its plans for tank integrity inspection.

If there were a spill, the public utility leaders would need to know the contents immediately. This information needs to be on file so an appropriate plan can be made before it is an emergency situation. Disclosure of the contents of these ASTs is imperative, required by statute, and should be part of the permit. This could be addressed in an individual NPDES permit.

4.10 Substantial Harm Determination

The Rockwool facility is located such that any toxic release to groundwater or surface water from the facility would shut down at least one public water supply and should therefore be classified with a Substantial Harm Determination. Harpers Ferry sources their drinking water from Elk Run, Jefferson Utilities Inc. from the aquifer, and Shepherdstown from Rocky Marsh Run. Additionally, there are thousands of households, businesses, and farms that source their drinking water for humans and animals from private wells in the aquifer. As discussed in the karst section of this document, the aquifer is contiguous over a long area of the county and the flow rate of the aquifer is rapid. A Substantial Harm Determination would require some relevant safeguards be in place. This could be addressed in an individual NPDES permit.

4.11 Waste Material Usage

Rockwool states, “no wastes or waste materials are used for deicing, fills, or any other uses on site unless provided for in an existing rule.” The “existing rule” needs to be further defined so that it can be determined what material is being used for what. Rockwool plans to use waste

material back into the furnace. As described in “Section G. Waste Material” of the ground water protection plan this use needs to be allowed either by regulation or permit. What regulation or permit covers this activity? Similar to as stated previously, this issue needs to be specifically addressed, including an analysis of whether RCRA applies to these waste usage activities; and, if so, whether proper regulatory action has been taken. The effect of this waste treatment, storage, and use on the water resources needs to be addressed.

Conclusion

This Petition is not an exhaustive list of the issues that need to be addressed in an individual NPDES permit for the Rockwool Ranson facility. The public simply does not have all of the information, such as the complete up-to-date plumbing plans, to present an exhaustive list of the basis for an individual permit. However, what is obvious is that due to the inappropriate siting and unique process of rainwater harvesting and process water recycling, that the processes at the Rockwool Ranson facility will not be adequately addressed under the General Multi-sector Stormwater Permit. Further, it is clear that Rockwool produces significant amounts of pollution and poses a risk to waters of the state. Therefore, Rockwool should be required to apply for and obtain an individual NPDES permit.

The Jefferson County Foundation respectfully requests that the Department consider the information provided within this submission on Rockwool’s Multi-Sector Industrial Stormwater Permit Application No. WVG611896, and formally respond to this Petition filed pursuant to 47 CSR 10 Section 13.6.b.2.A and require Rockwool to obtain a valid individual permit. Granting this petition will ensure that appropriate protections and oversight can be applied by the WVDEP to address all of the unique concerns the Rockwool facility poses to Jefferson County.

We believe that the information here and available to the DEP in its assessment of the petition, will prove that this is exactly the type of situation contemplated by the rule, to ensure that – whereas here – that a facility poses unique challenges, it deserves unique consideration. As we explained above:

- Rockwool is a significant contributor of pollution and as such should be required to obtain an individual permit.
- Rockwool’s facility is being located in a hydrogeologic setting with vulnerable groundwater resources, which can only be protected via the careful and tailored use of protective measures able to be imposed via an individual permit.
- Rockwool plans novel methods that are unlike those used in other mineral wool facilities in West Virginia and thus an individual permit is needed to appropriately protect the waters of the state.
- We presented 11 other specific concerns, which have been identified that require an individual permit to be adequately addressed.

Based on all the above information, Jefferson County Foundation petitions you, Mr. Caperton, to require that Rockwool apply for and obtain an individual NPDES permit for its Ranson facility. Please contact me for any further information that you believe would be helpful in evaluating the petition.

Regards,



Dr. Christine L. Wimer
President, Jefferson County Foundation, Inc.



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Pollution and children's health

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HIGHLIGHTS

- Pollution was responsible in 2016 for 940,000 deaths in children, two-thirds under age 5.
- 92% of pollution-related deaths in children occur in low- and middle-income countries.
- Most are due to respiratory and gastrointestinal diseases caused by polluted air and water.
- Pollution is linked also to multiple NCDs in children. These diseases are on the rise.
- Pollution prevention is a major opportunity to prevent disease and improve children's health.

GRAPHICAL ABSTRACT



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ABSTRACT

Findings: The Lancet Commission on Pollution and Health found that pollution – air, water, soil, and chemical pollution – was responsible in 2016 for 940,000 deaths in children worldwide, two-thirds of them in children under the age of 5. Pollution is inequitably distributed, and the overwhelming majority of pollution-related deaths in children occurred in low- and middle-income countries (LMICs). Most were due to respiratory and gastrointestinal diseases caused by polluted air and water.

Pollution is linked also to multiple non-communicable diseases (NCDs) in children including low birth weight, asthma, cancer and neurodevelopmental disorders, and these diseases are on the rise. The full impact of pollution, especially chemical pollution on the global burden of pediatric disease is not yet known, but almost certainly is undercounted because patterns of chemical exposure are not well charted and the potential toxicity of many chemical pollutants has not been characterized. The list of pediatric NCDs attributed to pollution will likely expand as the health effects of newer chemical pollutants are better defined and additional associations between pollution and disease are discovered.

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E-mail address: phil.landrigan@bc.edu (P.J. Landrigan).¹ were co-chairs of the Lancet Commission on Pollution and Health and Drs. Suk, Sly and Chiles were members of the Commission.

Conclusion: Pollution prevention presents a major, largely unexploited opportunity to improve children's health and prevent NCDs, especially in LMICs. Failure to incorporate pollution prevention into NCD control programs is a major missed opportunity for disease prevention.

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1. Introduction

Pollution is the world's largest environmental cause of disease and premature death. It is responsible for an estimated 9 million deaths per year—16% of all deaths worldwide— three times more deaths than AIDS, tuberculosis, and malaria combined (Landrigan et al., 2017). In the most severely affected countries, pollution is responsible for more than one death in four. Children are exquisitely sensitive to pollution (Suk et al., 2016).

Despite the great magnitude of the problem, pollution has been neglected in the international development and global health agendas.

To end this neglect, raise awareness of pollution's impacts, and mobilize the resources, political leadership and civic will needed to control pollution and prevent pollution-related disease, the *Lancet* Commission on Pollution and Health was formed in 2015. This Commission undertook a comprehensive analysis of pollution and its effects on human health and the global economy and disseminated its findings in October 2017 (Landrigan et al., 2017). This review is based on the *Lancet* Commission report and highlights pollution's impacts on the health of children.

2. Findings of the *Lancet* Commission on Pollution and Health

2.1. The global burden of pollution-related disease

Using data from the Global Burden of Disease study (Forouzanfar et al., 2015a and 2015b), the *Lancet* Commission found that air pollution is the largest cause of pollution-related disease. Air pollution is responsible for an estimated 6.4 million deaths per year – 4.2 million from ambient air pollution (HEI/HME, n.d.) and 2.8 million from household air pollution (Smith et al., 2014; Yadama, 2013). Water pollution is responsible for an estimated 1.8 million deaths annually. Occupational pollutants – dusts and carcinogens kill an estimated 800,000 people. Lead is responsible for approximately 500,000 deaths each year and additionally causes widespread, but inadequately quantified impairment of cognitive function and behavior.

The *Lancet* Commission found that in many places and especially in the growing cities of rapidly developing low- and middle-income countries, pollution – especially, ambient air pollution and chemical pollution – is getting worse. The numbers of deaths due to pollution-related disease are projected to rise still further in coming decades unless aggressive interventions are undertaken (Lelieveld et al., 2015). Key drivers of these increases are the uncontrolled growth of cities; rising demands for energy; mining; smelting; deforestation; the global spread of toxic chemicals; increasingly heavy applications of toxic insecticides and herbicides; and the growing global use of petroleum-powered cars, trucks, and buses.

2.2. Pollution and non-communicable disease

The *Lancet* Commission noted that pollution is a major cause of non-communicable diseases (NCDs) in persons of all ages – responsible for 16% of all NCD deaths globally. The impact of pollution on NCD mortality is especially strong in heavily polluted low- and middle-income countries where it exceeds the impacts of tobacco, alcohol and obesity (Landrigan et al., 2017; Fuller et al., 2018). In 2015, all forms of pollution combined were responsible for 21% of all deaths from cardiovascular disease, 26% of deaths due to ischemic heart disease, 23% of deaths

due to stroke, 51% of deaths due to chronic obstructive pulmonary disease, and 43% of deaths due to lung cancer (Landrigan et al., 2017).

2.3. Toxic chemical pollution

The Commission considered chemical pollution to be a great and growing threat to children's health. An estimated 140,000 new chemicals and pesticides have been invented and manufactured since 1950, and many have become widely disseminated in the earth's environment (Landrigan and Goldman, 2011; Prüss-Ustün et al., 2011). Patterns of exposure to manufactured chemicals are poorly mapped in most countries, and the toxicity of the majority of chemicals in commerce has never been evaluated.

2.4. Pollution, poverty and human rights

The *Lancet* Commission found that pollution is deeply intertwined with poverty and injustice and stated that pollution threatens fundamental human rights – the right to life, the right to health, the right to well-being, and the rights of the child (United Nations, 1948). Ninety-two per cent of pollution-related deaths occur in low- and middle-income countries – environmental injustice on a global scale, and in countries at every income level, pollution and pollution-related disease are disproportionately concentrated in poor, minority and marginalized communities (Bullard, 1990).

Pollution is not only a consequence of poverty. It can also cause and deepen poverty by producing disease, dysfunction, premature death that results in diminished economic productivity, lost income and increased health-care costs for already impoverished families (Furie and Balbus, 2012). In children, early-life exposures to neurotoxic pollutants can permanently impair cognitive function thus contributing to school failure and reduced lifetime earnings.

Globalization is a powerful driver of the increasing concentration of polluting industries in low- and middle-income countries. Globalization has resulted in the relocation of industries such as chemical manufacture and steel-making from higher income countries to poorer countries where wages are often low, environmental and occupational regulations non-existent and not enforced, and the public health infrastructure weak. Seventy per cent of heavy chemical manufacture today occurs in low- and middle-income countries.

Globalization results also in the trans-shipment of hazardous materials from high-income countries where they are produced to low- and middle-income countries – another example of global environmental injustice. Such dumping includes the shipment of hazardous pesticides, industrial waste, electronic waste (e-waste), and toxic chemicals. Well publicized examples include the transport in 2006 of 500 tons of toxic chemical wastes from Amsterdam to Abidjan, Cote d'Ivoire aboard the vessel *Probo Koala*; the subsequent release of these chemicals resulted in 17 deaths and in >100,000 cases of illness (Margai and Barry, 2011). Another example is a large e-waste site at Agbogbloshie, Ghana where thousands of discarded computers, cell phones, kitchen appliances and other electronics have been shipped from European ports in containers misleadingly labelled “secondhand goods” (Caravanos et al., 2011).

2.5. Pollution is costly

The *Lancet* Commission undertook economic analyses and found that pollution is very costly. Pollution causes productivity losses by

removing economically active people from the workforce through disease and premature death. Pollution is also responsible for increases in health care spending. In rapidly developing, heavily polluted lower middle-income countries the health and productivity losses caused by pollution can amount to as much as 5% of gross domestic product. These great losses can undercut national trajectories of economic and social development (Landrigan et al., 2017). On the positive side of the equation, pollution control can yield substantial economic gains by reducing health care costs and boosting the economic productivity of healthier populations (Suk et al., 2018).

2.6. Pollution and climate change

Pollution is linked to global climate change (McMichael, 2017; Perera, 2017). Fuel combustion—fossil fuel combustion in high-income and middle-income countries, and biomass burning in low-income countries—accounts for 85% of airborne particulate pollution and for almost all pollution by sulfur and nitrogen oxides (Scovronick et al., 2015). Fuel combustion is also the major source of the greenhouse gases and short-lived climate pollutants that are the main drivers of global climate change.

2.7. The root cause of pollution

The global growth of pollution can be directly attributed to the linear, take-make-use-dispose economic paradigm—termed by Pope Francis “the throwaway culture” (Francis, 2015) — a materialistic way of life in which natural resources and human capital are viewed as abundant and inexhaustible, and the consequences of their reckless exploitation are given little heed. This paradigm focuses single-mindedly on short-term economic gain as measured by growth in Gross Domestic Product (GDP). It is unethical and ultimately unsustainable (Raworth, 2017).

2.8. Children's vulnerability to pollution

Fetuses, infants and young children are exquisitely sensitive to environmental pollution, especially during windows of vulnerability in early development (Suk et al., 2016; Vrijheid et al., 2016). Pollution exposures in infancy and early childhood can result in lasting injury to cells and tissues that increases risk of disease in childhood and can also reverberate across the life span (Barker, 2004). A great danger of pollution exposure in early life can be that it can undermine efforts to enhance children's development through improved nutrition, early learning and better health care.

The diseases caused by traditional forms of environmental pollution (e.g., coliforms in water or air pollution from solid fuels) are predominantly diarrhea, pneumonia and other infectious diseases. Modern environmental threats, by contrast, are linked mainly to non-communicable diseases: asthma, neurodevelopmental disorders, birth defects, obesity, diabetes, cardiovascular disease, mental health problems, and pediatric cancer (WHO, 2018). Children in rapidly industrializing countries are simultaneously confronted by both ancient and modern environmental threats to health (Laborde et al., 2015).

A 1993 report by the US National Academy of Sciences (NAS, 1993) explored the origins of children's sensitivity to environmental pollutants and identified four key differences between children and adults:

1. Children breathe more air, drink more water, and eat more food than adults each day on a per-kilogram body-weight basis and therefore have proportionately greater exposures to environmental pollutants.
2. Children's metabolic pathways are immature and therefore children are unable to rapidly detoxify and excrete many toxic pollutants.
3. Children's exquisitely delicate developmental processes are easily disrupted. There exist windows of vulnerability in early human development that have no counterpart in adult life. Exposure to even very low doses of toxic chemicals or other environmental hazards

during these sensitive periods can increase risk of disease in childhood and across the life span.

4. Children have more future years than adults to develop diseases of long latency that may be triggered by harmful exposures in early life.

2.9. Air pollution and children's health

Exposure to air pollution in early human development, especially exposure to fine particulate pollution can be extremely deleterious to children's health and development. Maternal exposure to particulate pollution during pregnancy can injure the developing fetal brain thus diminish children's intelligence (Perera, 2017). Air pollution exposure in pregnancy also increases risk for prematurity and low birth weight—two further risk factors for developmental disabilities (Woodruff et al., 2007; Jacobs et al., 2017). Exposure to air pollution during infancy and early childhood causes lung damage, impairs lung growth, and can increase subsequent risk for asthma, pneumonia and chronic obstructive pulmonary disease (Gauderman et al., 2015; Korten et al., 2017).

2.10. Chemical pollution and children's health

Young children and pregnant women are exposed daily to manufactured chemicals in air, water, soil, consumer products and food (Landrigan and Goldman, 2011). Routine monitoring surveys detect several hundred chemical pollutants in the bodies of all persons (CDC, n.d.). Some widely used chemicals are known to be toxic to children's development. Hundreds more have never been tested for safety or toxicity and their possible dangers to children's health and development are not known (Landrigan and Goldman, 2011).

Toxic manufactured chemicals have been responsible for multiple episodes of disease and death in both children and adults. Historical examples include asbestos (multiple cancers) (Selikoff et al., 1968); tetraethyl lead (adult and pediatric lead poisoning) (Needleman et al., 1979); benzene (leukemia and lymphoma) (Rinsky et al., 2002); benzidine-based dyes (bladder cancer) (Rehn, 1895); the rubber chemical, 1, 3-butadiene (leukemia and lymphoma) (Landrigan, 1990); and the organophosphate pesticides (developmental neurotoxicity) (Rauh et al., 2011).

Newer synthetic chemicals that have entered markets in the past 2–3 decades threaten to repeat this unfortunate history. They include developmental neurotoxicants such as phthalates and brominated flame retardants (Engel et al., 2010; Herbstman and Mall, 2014; Grandjean and Landrigan, 2014); endocrine disruptors (Gore et al., 2015); the herbicide glyphosate, recently found by the International Agency for Research on Cancer (IARC) to be a probable human carcinogen (Guyton et al., 2015); the neonicotinoid insecticides (Cimino et al., 2016); pharmaceutical wastes (Kümmerer, 2009); and manufactured nanomaterials. Early warnings that new chemicals and other environmental hazards might pose hazards to children's health have frequently been ignored (Jarosinska and Gee, 2007). As a result, efforts to control exposures and to prevent disease have often been delayed, sometimes for decades. (Landrigan and Goldman, 2011).

Two fundamental problems that underlie these recurrent episodes of disease and death caused by manufactured chemicals are failure of the chemical manufacturing industries to take responsibility for the materials they produce coupled with absence in most countries of chemical safety policies requiring that new chemicals be tested for safety or toxicity before they are allowed to enter commercial markets (Landrigan and Goldman, 2011). Fewer than half of the most widely used chemicals have ever been tested for safety or toxicity, and fewer than 20% have been assessed for potential to disrupt early human development. Premarket evaluation of new chemicals has become mandatory in only the past decade and in only a few high-income countries.

In children, multiple non-communicable diseases (NCDs) have been linked to toxic chemical pollutants. Prospective birth cohort epidemiologic studies that measure environmental exposures during pregnancy

and in early postnatal life and then follow children longitudinally have contributed greatly to discovery of these associations. Examples include:

- Asthma is increased in children exposed to particulate air pollution (Friedman et al., 2001; Suh et al., 2000);
- Neurodevelopmental impairment with reduction of IQ, shortening of attention span and disruption of behavior is caused by early-life exposure to lead (Budtz-Jørgensen et al., 2013);
- Neurodevelopmental impairment with reduction of IQ is observed in children exposed to PCBs (Jacobson and Jacobson, 1996);
- Neurodevelopmental impairment with reduction of IQ and shortening of attention span is seen in children exposed to methyl mercury (Grandjean et al., 1997);
- Neurodevelopmental impairment with loss of IQ is seen in infants exposed prenatally to arsenic (Wasserman et al., 2007) and to manganese in chemically contaminated drinking water (Khan et al., 2011);
- Neurodevelopmental impairment with loss of IQ and behavioral disruption is associated with prenatal exposure to organophosphate pesticides (Rauh et al., 2011). Prenatal exposures to organophosphates are also linked to changes in brain structure and function in children (Rauh et al., 2012).
- Neurodevelopmental impairment with loss of IQ, behavioral disruption and increased risk of attention deficit/hyperactivity disorder (ADHD) is associated with prenatal exposures to phthalates (Engel et al., 2010; Engel et al., 2018).
- Neurodevelopmental impairment with persisting loss of IQ and disruption of behavior is associated with prenatal exposure to brominated flame retardants (Herbstman and Mall, 2014).
- Slow brain maturation and delayed cognitive development with exposure of school-aged children to traffic-related air pollution. (Pujol et al., 2016; Sunyer et al., 2015)

A major unanswered question is whether there are additional chemical pollutants in wide use today that have not yet been recognized to endanger the health of children. Fig. 1 illustrates this concept in relation to developmental neurotoxicants. Commenting on the hazards inherent in children's widespread exposure to untested chemicals, the late David

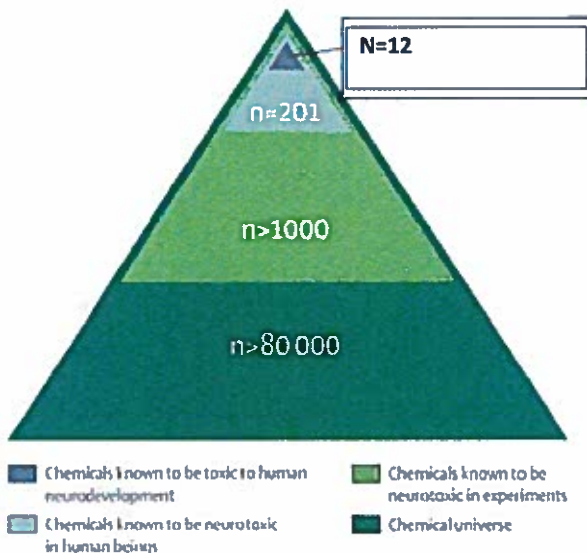


Fig. 1. The extent of knowledge of neurotoxic chemicals. Of the thousands of chemicals in commerce, only a small fraction have been proven to cause developmental neurotoxicity in children, but another 200 can cause neurotoxicity in adult workers and another 1000 are neurotoxic in experimental animals. Most of the chemicals in these two latter groups have never been tested for potential to cause developmental neurotoxicity (From Grandjean and Landrigan, 2006).

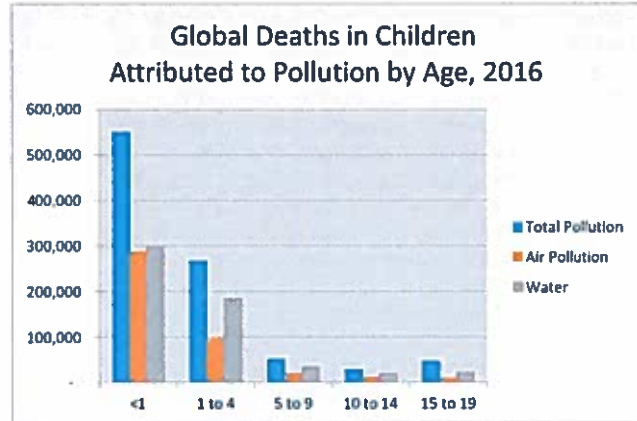


Fig. 2. Global deaths in children attributed to pollution by age, 2016.

Rall, PhD, MD, former director of the US National Institute of Environmental Health Sciences, observed that:

"If thalidomide had caused a ten-point loss of IQ instead of obvious birth defects of the limbs, it would probably still be on the market."
 [(Weiss, 1982)]

2.11. Pollution's contribution to the global burden of disease in children

The World Health Organization estimates that physical, chemical, and biological hazards in the environment are responsible for 26% of all deaths in children under the age of five years – nearly 1.5 million deaths worldwide (WHO, 2018). The WHO definition of environmental risks is broad and includes road accidents, ultraviolet and ionizing radiation, noise, electromagnetic fields, occupational psychosocial risks, built environments, agricultural methods, and man-made climate and ecosystem change as well as pollution.

The Lancet Commission on Pollution and Health found that pollution – defined specifically as air, water, soil, and toxic chemical pollution – was responsible in 2016 for 940,000 deaths in children, two-thirds of them in children under the age of 5 years (Landrigan et al., 2017) (Fig. 2). The overwhelming majority of these pollution-related deaths occurred in low- and middle-income countries. (Fig. 3 and Fig. 4) Most were due to respiratory and gastrointestinal diseases caused by polluted air and water. (Fig. 2 and Table 1).

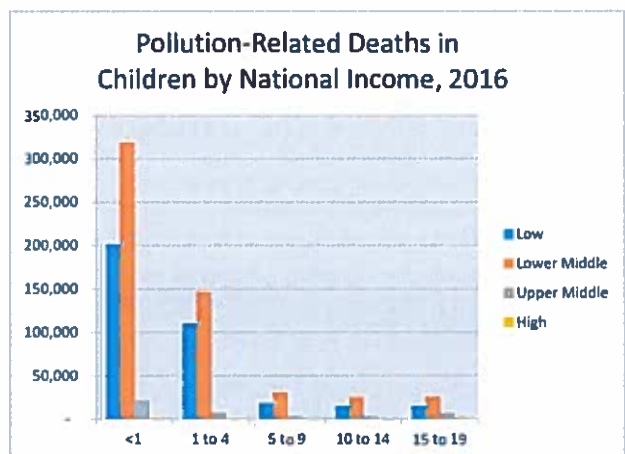


Fig. 3. Pollution-related deaths in children by national income, 2016.

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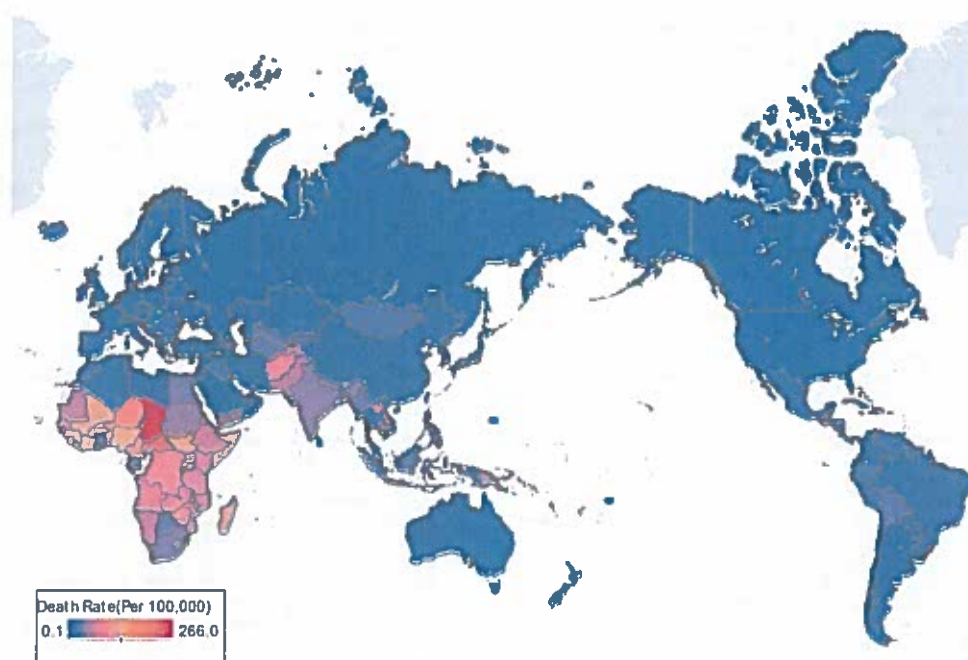


Fig. 4. Number of deaths per 100,000 children, 0–19 years of age, attributable to all forms of pollution, by country, 2016.

Pollution is linked additionally to multiple non-communicable diseases (NCDs) in children including low birth weight, asthma, cancer and neurodevelopmental disorders. Pollution exposures in early life also increase risk across the lifespan for a range of NCDs including chronic obstructive pulmonary disease, cardiovascular disease, stroke and cancer (Barker, 2004). The full impact of pollution and especially of toxic chemical pollution on the global burden of NCDs in children is not yet known and almost certainly is undercounted. A root cause of this lack of information is failure to assess the safety and characterize the potential toxicity of many chemicals to which children are extensively exposed. It is likely that the list of NCDs in children attributed to pollution will expand as the health effects of newer chemical pollutants are better defined and additional associations between pollution and disease are discovered.

3. Conclusion

A key message of the *Lancet* Commission on Pollution and Health is that with leadership, resources and clearly articulated, data-driven strategies, pollution can be controlled and pollution-related disease prevented (Landrigan et al., 2017). The experience of the many cities and countries that have developed, field-tested and successfully implemented pollution control policies provides strong support for this proposition. Implementation of pollution control strategies can provide multiple benefits, both short-term and long-term, for human health, the economy and the environment for societies at every level of income (Grosse et al., 2002; Samet et al., 2017).

Table 1
Global deaths in children attributable to pollution, 2016.

Age range	Total pollution	Air pollution	Water
<1	550,854	286,863	296,655
1 to 4	267,241	95,999	182,924
5 to 9	50,617	18,871	33,882
10 to 14	27,912	10,409	18,660
15 to 19	46,085	8788	21,389

Long-term control of pollution and prevention of pollution-related diseases in children will require that societies at every level of income prevent pollution at source by fundamentally changing societal patterns of production, consumption and transportation (Collins et al., 2013; Collins et al., 2013; Whitmee et al., 2015; McMichael, 2017). This transition will require movement away from the current, fundamentally unsustainable linear economic paradigm towards a new paradigm rooted in the concept of the circular economy and based on recognition of human rights, especially the right of children to health and well-being (Francis, 2015; World Economic Forum, 2014; HEAL, n.d.).

Pollution prevention presents a major, underexploited opportunity to improve child health, prevent NCDs in children, and advance social justice in all countries and especially in low- and middle-income countries. Failure to incorporate pollution prevention into NCD control programs is a major missed opportunity for disease prevention.

References

- Barker, D.J., 2004. The developmental origins of adult disease. *J. Am. Coll. Nutr.* 23 (588S–95S).
- Budtz-Jørgensen, E., Bellinger, D., Lanphear, B., Grandjean, P., International Pooled Lead Study Investigators, 2013 Mar. An international pooled analysis for obtaining a benchmark dose for environmental lead exposure in children. *Risk Anal.* 33 (3), 450–461.
- Bullard, R.D., 1990. Boulder CO. Dumping In Dixie: Race, Class, and Environmental Quality. Westview Press, Boulder, CO.
- Caravanos, J., Clark, E., Fuller, R., Lambertson, C., 2011. Assessing worker and environmental chemical exposure risks at an e-waste recycling and disposal site in Accra, Ghana. *J. Health Pollut.* 1, 16–25.
- Centers for Disease Control and Prevention (CDC), d. National biomonitoring program. Available at: <https://www.cdc.gov/biomonitoring/index.html>. Accessed date: 3 July 2018.
- Cimino, A.M., Boyles, A.L., Thayer, K.A., Perry, M.J., 2016. Effects of neonicotinoid pesticide exposure on human health: a systematic review. *Environ. Health Perspect.* 125. <https://doi.org/10.1289/EHP515>.
- Collins, T.J., Crews, D., DeFur, P.L., Dickerson, S.M., Edwards, T.M., Gore, A.C., Guillette, L.J., Hayes, T., Heindel, J.J., Moores, A., Patisaul, H.B., Tal, T.L., Thayer, K.A., Vandenberg, L.N., Warner, J.C., Watson, C.S., vom Saal, F.S., Zoeller, R.T., O'Brien, K.P., Myers, J.P., Schug, T.T., Abagyan, R., Blumberg, B., 2013. Designing endocrine disruption out of the next generation of chemicals. *Green Chem.* 15, 181–198. <https://doi.org/10.1039/c2gc35055f>.
- Engel, S.M., Miodovnik, A., Canfield, R.L., et al., 2010. Prenatal phthalate exposure is associated with childhood behavior and executive functioning. *Environ. Health Perspect.* 118, 565–571.

- Engel, S.M., Villanger, G.D., Nethery, R.C., et al., 2018 May 10. Prenatal phthalates, maternal thyroid function, and risk of attention-deficit hyperactivity disorder in the Norwegian mother and child cohort. *Environ. Health Perspect.* 126 (5), 057004. <https://doi.org/10.1289/EHP2358>.
- Forouzanfar, M., 2015a. Mortality and causes of death collaborators. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 388, 1459–1544. [https://doi.org/10.1016/S0140-6736\(16\)31012-1](https://doi.org/10.1016/S0140-6736(16)31012-1) (GBD).
- Forouzanfar, M., 2015b. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease 2016. *Lancet* 388, 1659–1724. [https://doi.org/10.1016/S0140-6736\(16\)31679-8](https://doi.org/10.1016/S0140-6736(16)31679-8) (GBD, Risk Factors Collaborators).
- Friedman, M.S., Powell, K.E., Hutwagner, L., Graham, L.M., Teague, W.G., 2001. Impact of changes in transportation and commuting behaviors during the 1996 summer Olympic games in Atlanta on air quality and childhood asthma. *JAMA* 285, 897–905.
- Fuller, R., Rahona, E., Fisher, S., Caravanos, J., Webb, D., Kass, D., Matte, T., Landrigan, P.J., 2018. Pollution and non communicable disease – time to end the neglect. *Lancet Planet Health* 2 (3), e96–e98.
- Furie, G.L., Balbus, J., 2012. Global environmental health and sustainable development: the role at Rio+20. *Cien Saude Colet* 17, 1427–1432.
- Gauderman, W.J., Urman, R., Avol, E., et al., 2015. Association of improved air quality with lung development in children. *N. Engl. J. Med.* 372, 905–913.
- Gore, A.C., Chappell, V.A., Fenton, S.E., et al., 2015. EDC-2: the Endocrine Society's second scientific statement on endocrine-disrupting chemicals. *Endocr. Rev.* 36, E1–150.
- Grandjean, P., Landrigan, P.J., 2006. Developmental neurotoxicity of industrial chemicals: a silent pandemic. *Lancet* 368 (9553), 2167–2178.
- Grandjean, P., Landrigan, P.J., 2014. Neurobehavioural effects of developmental toxicity. *Lancet Neurol.* 13, 330–338.
- Grandjean, P., Weihe, P., White, R.F., Debes, F., Araki, S., Yokoyama, K., 1997. Cognitive deficit in 7-year old children with prenatal exposure to methylmercury. *Neurotoxicol. Teratol.* 19 (6), 417–428.
- Grosse, S.D., Matte, T.D., Schwartz, J., Jackson, R.J., 2002. Economic gains resulting from the reduction in children's exposure to lead in the United States. *Environ. Health Perspect.* 110, 563–569.
- Guyton, K.Z., Loomis, D., Grosse, Y., et al., 2015. Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon, and glyphosate. *Lancet Oncol.* 490–491.
- Health and Environment Alliance (HEA), d. Walking the circle – the 4 guiding pillars for a circular economy. http://env-health.org/IMG/pdf/walking_the_circle.pdf, Accessed date: 30 March 2017.
- Health Effects Institute (HEI) and Institute for Health Metrics and Evaluation (IHME), d. State of global air – 2018. Available at: <https://www.stateofglobalair.org>, Accessed date: 3 July 2018.
- Herbstman, J.B., Mail, J.K., 2014. Developmental exposure to polybrominated diphenyl ethers and neurodevelopment. *Curr. Environ. Health Rep.* 2 (1), 101–112.
- Jacobs, M., Zhang, G., Chen, S., Mullins, B., Bell, M., Jin, L., Guo, Y., Huxley, R., Pereira, G., 2017 Feb 1. The association between ambient air pollution and selected adverse pregnancy outcomes in China: a systematic review. *Sci. Total Environ.* 579, 1179–1192. <https://doi.org/10.1016/j.scitotenv.2016.11.100> Epub 2016 Nov 29. (PMID: 27913015).
- Jacobson, J.L., Jacobson, S.W., 1996. Intellectual impairment in children exposed to polychlorinated biphenyls in utero. *N. Engl. J. Med.* 335 (11), 783–789.
- Jarosinska, D., Gee, D., 2007 Oct. Children's environmental health and the precautionary principle. *Int. J. Hyg. Environ. Health* 210 (5), 541–546 Epub 2007 Sep 21. (PMID: 17889608).
- Khan, K., Factor-Litvak, P., Wasserman, G.A., Liu, X., Ahmed, E., Parvez, F., et al., 2011. Manganese exposure from drinking water and children's classroom behavior in Bangladesh. *Environ. Health Perspect.* 119, 1501–1506.
- Korten, J., Ramsey, K., Latzin, P., 2017 Jan. Air pollution during pregnancy and lung development in the child. *Paediatr. Respir. Rev.* 21, 38–46. <https://doi.org/10.1016/j.prrv.2016.08.008> Epub 2016 Aug 19. (PMID: 27665511).
- Kümmerer, K., 2009. Antibiotics in the aquatic environment – a review – part II. *Chemosphere* 75, 435–441.
- Laborde, A., Tomasina, F., Bianchi, F., Bruné, M.N., Buka, I., Comba, P., Corra, L., Cori, L., Duffert, C.M., Harari, R., Iavarone, I., McDiarmid, M.A., Gray, K.A., Sly, P.D., Soares, A., Suk, W.A., Landrigan, P.J., 2015 Mar. Children's health in Latin America: the influence of environmental exposures. *Environ. Health Perspect.* 123 (3), 201–209. <https://doi.org/10.1289/ehp.1408292>.
- Landrigan, P.J., 1990. Critical assessment of epidemiologic studies on the human carcinogenicity of 1,3-butadiene. *Environ. Health Perspect.* 86, 143–147.
- Landrigan, P.J., Goldman, L.R., 2011. Children's vulnerability to toxic chemicals: a challenge and opportunity to strengthen health and environmental policy. *Health Aff.* 30, 842–850. <https://doi.org/10.1377/hlthaff.2011.0151>.
- Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., N. Basu, et al., 2017. The Lancet Commission on pollution and health. *Lancet* [https://doi.org/10.1016/S0140-6736\(17\)32345-0](https://doi.org/10.1016/S0140-6736(17)32345-0).
- Lelieveld, J., Evans, J.S., Fnais, M., Giannadaki, D., Pozzer, A., 2015. The contribution of outdoor air pollution sources to premature mortality on a global scale. *Nature* 525, 367–371. <https://doi.org/10.1038/nature15371>.
- Margai, F.M., Barry, F.B., 2011. Global geographies of environmental injustice and health: a case study of illegal hazardous waste dumping in Cote d'Ivoire. *Geospatial Anal. Environ. Health* 4, 257–281.
- McMichael, A.J., 2017. *Climate Change and the Health of Nations: Famines, Fevers, and the Fate of Populations*. Oxford University Press, London.
- National Academy of Sciences, 1993. *Pesticides in the Diets of Infants and Children*. National Academies Press, Washington, DC.
- Needleman, H.L., Gunnoe, C., Leviton, A., et al., 1979. Deficits in psychologic and classroom performance of children with elevated dentine lead levels. *N. Engl. J. Med.* 300 (13), 689–695.
- Perera, F.P., 2017. Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change. *Environ. Health Perspect.* 125, 141–148. <https://doi.org/10.1289/EHP299>.
- Prüss-Ustün, A., Vickers, C., Haefliger, P., Bertollini, R., 2011. Knowns and unknowns on burden of disease due to chemicals: a systematic review. *Environ. Health* 10, 9. <https://doi.org/10.1186/1476-069X-10-9>.
- Pujol, J., Martínez-Vilavela, G., Macia, D., et al., 2016. Traffic pollution exposure is associated with altered brain connectivity in school children. *NeuroImage* 129, 175–184.
- Rauh, V., Arunajadai, S., Horton, M., et al., 2011. 7-year neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. *Environ. Health Perspect.* 119, 1196–1201.
- Rauh, V.A., Perera, F.P., Horton, M.K., et al., 2012 May 15. Brain anomalies in children exposed prenatally to a common organophosphate pesticide. *Proc. Natl. Acad. Sci. U. S. A.* 109 (20), 7871–7876.
- Raworth, K., 2017. *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Chelsea Green Publishing, White River Junction, Vermont.
- Rehn, L., 1895. Blasengeschwülste bei Fuchsin-Arbeitern. *Verh. Dtsch. Gesellsch. Chir.* 24, 240–252.
- Rinsky, R.A., Hornung, R.W., Silver, S.R., Tseng, C.Y., 2002 Dec. Benzene exposure and hematopoietic mortality: a long-term epidemiologic risk assessment. *Am. J. Ind. Med.* 42 (6), 474–480 (PMID: 12439870).
- Samet, J.M., Burke, T.A., Goldstein, B.D., 2017. The trump administration and the environment – heed the science. *N. Engl. J. Med.* 376, 1182–1188.
- Scovronick, N., Dora, C., Fletcher, E., Haines, A., Shindell, D., 2015. Reduce short-lived climate pollutants for multiple benefits. *Lancet* 386, e28–e31. [https://doi.org/10.1016/S0140-6736\(15\)61043-1](https://doi.org/10.1016/S0140-6736(15)61043-1).
- Selikoff, I.J., Hammond, E.C., Churg, J., 1968. Asbestos exposure, smoking and neoplasia. *JAMA* 204, 106–112.
- Francis, 2015. *Laudato Si: Encyclical Letter on Care for our Common Home*. Vatican City Holy See.
- Smith, K.R., Bruce, N., Balakrishnan, K., Adair-Rohani, H., Balmes, J., Chafe, Z., Dherani, M., Hosgood, H.D., Mehta, S., Pope, D., Rehfuess, E., HAP CRA Risk Expert Group, 2014. Millions dead: how do we know and what does it mean? Methods used in the comparative risk assessment of household air pollution. *Annu. Rev. Public Health* 35, 185–206. <https://doi.org/10.1146/annurev-publhealth-032013-182356>.
- Suh, H.H., Bahadori, T., Vallarino, J., Spengler, J.D., 2000. Criteria air pollutants and toxic air pollutants. *Environ. Health Perspect.* 108 (Suppl. 4), 625–633.
- Suk, W.A., Ahanchian, H., Asante, K.A., et al., 2016. Environmental pollution: an underrecognized threat to children's health, especially in low- and middle-income countries. *Environ. Health Perspect.* 124 (3), A41–A45. <https://doi.org/10.1289/ehp.1510517>.
- Suk, W.A., Heacock, M.L., Trotter, B.A., Amolegbe, S.M., Avakian, M.D., Henry, H.F., Carlin, D.J., Reed, L.G., 2018. Assessing the economic and societal benefits of SRP-funded research. *Environ. Health Perspect.* <https://doi.org/10.1289/EHP3534> (in press).
- Sunyer, J., Esnaola, M., Alvarez-Pedrerol, M., et al., 2015. Association between traffic-related air pollution in schools and cognitive development in primary school children: a prospective cohort study. *PLoS Med.* 12 (e1001792).
- United Nations, Dec 10, 1948. Universal declaration of human rights. <http://www.un.org/en/universal-declaration-humanrights/>, Accessed date: 18 January 2017.
- Vrijheid, M., Casas, M., Gascon, M., Valvi, D., Nieuwenhuijsen, M., 2016 Jul. Environmental pollutants and child health: a review of recent concerns. *Int. J. Hyg. Environ. Health* 219 (4–5), 331–342. <https://doi.org/10.1016/j.ijheh.2016.05.001> Epub 2016 May 11. (PMID: 27216159).
- Wasserman, G.A., Liu, X., Parvez, F., Ahsan, H., Factor-Litvak, P., Kline, J., et al., 2007. Water arsenic exposure and intellectual function in 6-year-old children in Araihazar, Bangladesh. *Environ. Health Perspect.* 115, 285–289.
- Weiss, B., 1982. Food additives and environmental chemicals as sources of childhood behavior disorders. *J. Am. Acad. Child Psychiatry* 21, 144–152.
- Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Souza Dias, B.F., Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G.M., Marten, R., Myers, S.S., Nishtar, S., Osofsky, S.A., Pattanayak, S.K., Pongsiri, M.J., Romanelli, C., Soucat, A., Vega, J., Yach, D., 2015 Nov 14. Safeguarding human health in the Anthropocene epoch: report of the Rockefeller Foundation-Lancet Commission on planetary health. *Lancet* 386 (10007), 1973–2028. [https://doi.org/10.1016/S0140-6736\(15\)60901-1](https://doi.org/10.1016/S0140-6736(15)60901-1) (Epub 2015 Jul 15).
- Woodruff, T.J., Darrow, L.A., Parker, J.D., 2007. Air pollution and postneonatal infant mortality in the United States, 1999–2002. *Environ. Health Perspect.* 116, 110–115.
- World Economic Forum, January, 2014. *Towards the Circular Economy: accelerating the scale-up across global supply chains*. http://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf accessed March 13, 2017.
- World Health Organization (WHO), 2018. *Inheriting a Sustainable World? Atlas on Children's Health and the Environment*. WHO, Geneva Available at: <http://www.who.int/ceh/publications/inheriting-a-sustainable-world/en/>, Accessed date: 5 July 2018.
- Yadama, G.N., 2013. *Fires, Fuel, and the Fate of 3 Billion: The State of the Energy Imperished*. Oxford University Press.

Stacey Pfaltzgraff

From: Susie Wimer <susiewimer@yahoo.com>
Sent: Thursday, June 18, 2020 4:51 PM
To: Stacey Pfaltzgraff; Duke Pierson; Gene Taylor; Scott Coulter; Tony Grant; Amanda Str
Mike Anderson; Don Haines
Subject: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING
MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20
AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT
DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"
Attachments: Ordinance #2017-302 Public Comment.Appendix.SW.pdf; Ordinance #2017-302 Writ
Public Comment.SW.pdf; 1-s2.0-S0048969718338543-main 2.pdf; Public-Comments-
WVR108876-and-WVG611896-Wimer-Jefferson-County-Foundation-.pdf; Petition-RI
Industrial-Stormwater-Permit-Application-No.-WVG611896-Wimer.fnl_ (1).pdf

CAUTION: External Email

Dear Ms. Pfaltzgraff,

Please accept this and all attachments and linked documents as written public comment for the above referenced hearing. Please also find attached an appendix file that has figures to accompany the written letter and three supporting documents referenced in the letter. Please also refer to [this link](#) for the exhibits referred to in the Petition to the WVDEP (PDF is attached).

Thank you.

Susie Wimer

Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Jefferson County Foundation, Inc.

101 Marl Drive
Ranson, WV 25438

June 18, 2020

City of Ranson Council Members
312 S. Mildred St.
Ranson, WV 25438

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Dear Mr. Mayor and Council Members:

I respectfully request that you vote no on Ordinance #2017-302. This zoning change will violate the intention of the comprehensive plan of Ranson to provide ample affordable housing in complete communities that will allow residents to live, work, and shop in the same community. Instead, it will promote replacing them with a single-use area that would be a separate pod of land use. This zoning change will also allow land to be used for industry that it is totally inappropriate and ill-suited to, endangering the water resources and water safety. Through its air emissions, effects on local industry, and water quality the industry this zoning will provide for will adversely affect the health, safety and welfare of the community. This zoning change adds no additional advantage to the residents of Ranson and violates the comprehensive plan in several key areas working in contrast to the goals, objectives and actions of the comprehensive plan. This will result in consequences that were intended to be prevented by the comprehensive plan. Please vote NO zoning ordinance #2017-302.

1.0 Community Planning

In chapter 3 of the 2012 comprehensive plan of Ranson, the Private Realm the introduction states: "Today, the vision for the land in the Urban Growth Boundary is multiple neighborhoods using distinctive names to create their own identity and preserve the small-town atmosphere. Each of these neighborhoods should have its own commercial center to support their local needs and reduce trip generation." (page 27, 2012 comprehensive plan) In this section and throughout the document, the comprehensive plan continues to reiterate that complete communities and neighborhoods are the goal and that large tracts of land dedicated to a sole type of use that do not allow integration into the community is not in alignment with the plan. This zoning change

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would literally eliminate a complete community, and replace it with a large tract of land for a sole use. Further, this sole use is inappropriate to be integrated into a community, so it would become a pod of separate land-use.

The first Private Realm objective in chapter 3 is listed as “1. Maintain the historic mix of housing with businesses. Mixed use should be the norm throughout neighborhoods, districts, and corridors. **Single-use areas should be the exception.** Every place within each neighborhood should have a **variety of compatible uses and building types.**” (page 27, 2012 comprehensive plan) Figure 2.3 the sector map of the 2012 comprehensive plan is underlain by the following passage: “The Sector Plan is the primary planning tool in the Urban Growth Boundary for guiding future growth. Instead of planning for **Pods of separate land uses**, the Sector Plan plans for **complete Communities** – compact, pedestrian-oriented, mixed use neighborhoods as well as identifying areas to remain suburban for the near term.” In section 3.1 Land Use in the general introduction, it states: “Neighborhoods, districts and corridors are the essential elements of development and redevelopment in the City. They form identifiable areas that encourage citizens to take responsibility for their maintenance and evolution.” (page 29, 2012 comprehensive plan) Under section 3.1.2 preferred development, it states: “Community types include: historic preservation of the existing Old Town neighborhoods; redevelopment and renewal of existing neighborhoods, and **new complete neighborhoods** as the preferred development pattern for expansion.” (page 34, 2012 comprehensive plan) It is made abundantly clear throughout the Private Realm section and particularly the Land Use section of the 2012 Comprehensive Plan that the focus and goal of the comprehensive plan is to develop new complete communities as growth is expanded into the undeveloped urban growth boundary.

It is also clear that Jefferson Orchard including the land in question is within the urban growth boundary and slated for this type of development. In section 3.1 Land Use of the 2012 Ranson Comprehensive Plan, under General, it states: “The undeveloped land within the Urban Growth Boundary is planned for **complete communities** that support the economy and quality of life of Old Town Ranson.” (page 29, 2012 comprehensive plan) According to figure 2.3, the sector map on page 21 of the 2012 Ranson Comprehensive Plan, the land under consideration for this zoning change is in the G3 Preferred Growth designation along with the remainder of Jefferson Orchard (Exhibit x). Table 2.1 on page 20 of the comprehensive plan defines G3 Preferred Growth as intended for Preferred Expansion. (Exhibit x) Therefore, the land being considered for this zoning change and all of Jefferson Orchards is undeveloped land within the Urban Growth Boundary that is, according to the 2012 comprehensive plan, preferred for development and as such, again according to the plan, it should be planned for a **complete community** as directed in section 3.1 as quoted above. The 2012 zoning plan for the development of Jefferson Orchards **provided for complete communities** that supplied much needed affordable housing, parks schools and community centers within walking distance for residents, and neighborhoods where residents could live, work and shop. In contrast, this proposed zoning change reduces the production of affordable housing, eliminates a planned complete community, and due to the current land owner’s insistence that the adjacent development be limited, **would lead to a single-use area or pod of separate land-use.**

2.0 Housing

Ranson has a history — even before incorporation — of having affordable housing and throughout the 2012 Comprehensive Plan, affordable housing is clearly a priority. There are many locations where this priority is highlighted, a few of them are highlighted here. In section 3.1, under General Land Use Actions number 1, Revise the Zoning Ordinance via the Smart Code section “c” states: “Encourage a variety of building types – particularly for affordable housing.” Number 5 of this same section states: “Support affordable low-cost housing.” On page 37 under section 3.2 housing, it states: “Since the Department of Housing and Urban Development has established that a household should spend no more than 30% of its annual income on housing, affordable housing solutions is paramount to Ranson’s future.” (page 37, 2012 comprehensive plan) On page 37 still under housing, it states: “Through the Federal grants and the planning that has resulted, the City is poised to replace outdated, use-segregating ordinances with those that can enable affordable solutions.” (page 38, 2012 comprehensive plan) On page 39 under section “f” of housing actions, it states: “When selecting sites for affordable housing, consider proximity to workplaces. For many people, transportation is second only to housing in cost. Public transportation and sheer proximity to work, shopping, and amenities can reduce transportation costs – and make the combination of transportation and housing more affordable.” (page 39, 2012 comprehensive plan) It is obvious that the intention of the comprehensive plan is to provide for the development of affordable housing.

Further, it is clear as discussed in the above section that the plan intends this affordable housing to be in complete communities where common facilities (i.e. parks, schools, community centers) are provided and residents can live work and shop in the same community. In section 3.1.1 Community Design under Community Design Action number 3.a., it states: “Do not allow concentrations of poverty to develop.” Similar statements are made on page 32, 44, 101, and 114 of the comprehensive plan. This it is also clear that the comprehensive plan does want this affordable housing to be concentrated in less desirable areas that become concentrations of poverty. Complete communities solve this by planning an appropriate mix of housing where the “overall standard should be raised to that usually demanded by business people.” (page 39 of the Comprehensive Plan section 1.e. of Housing Actions) This allows individuals and families of all incomes to live and enjoy the same neighborhoods with less need for travel and more healthy communities.

The current zoning change would remove hundreds of housing units further limiting the affordable housing that Ranson can provide. One entire complete community will be removed and replaced by expanding a single use tract of land that contains no housing. The entity that currently plans to utilize this zoning change will make this area so undesirable that those who can afford to live elsewhere will not plan to live in a new community near this facility. Further, in those communities that currently surround the site being considered for rezoning, the great majority of those who can afford to leave the area will. This will further depress this already relatively and historically lower income underserved area. If the remainder of Jefferson Orchards is developed into a new community, only those who cannot effectively find housing in more desirable locations will move here. This will effectively create a “concentration of poverty,” to develop in the area surrounding this zoning change.

The entity currently planning to utilize this zoning change has attempted to limit further development in the remainder of Jefferson Orchards effectively steering it away from new community development. This would further reduce affordable housing development, create a pod of separate land use, and increase trip generation. All of these are listed as things that should be disallowed by further development.

3.0 Environmental Objectives

The comprehensive plan clearly intends for environmental concerns to be taken into account and specifically addresses this in multiple sections of the plan. The clear objective of the plan is to protect the environment from degradation and allow residents from noxious entities by designating land for appropriate uses through appropriate zoning.

3.1 Respect Adjacent Natural and Other Open Areas

Under section 3.1.3 Redevelopment and Renewal Objectives, it states: “1. Ensure that redevelopment respects adjacent natural and other open areas. Redevelopment abutting open areas should meet them sensitively, both in terms of appearance and in environmental terms.” (page 35, 2012 comprehensive plan) The area to be rezoned abuts open natural areas that are in the county. The proposed zoning change would provide for industry that would be sensitive in neither the appearance nor environmental terms. The entity currently planning to utilize the zoning change will have air emissions that include large amounts of PM10. The entity’s own air modeling reveals that a majority of this will fall to the ground in the immediate vicinity, adversely affecting the abutting open areas. This zoning change would violate this objective of the comprehensive plan.

3.2 Avoid Noxious Uses

In Chapter 4 section 4.5 Natural Environment, subsection Natural Environment Objectives, number two states: “Avoid noxious uses in the annexed area. In this case, a ‘noxious’ use is one which poses a hazard, or which nobody would like to live or have their food grown near...” (page 84, Chapter 4, section 5, Natural Environment subsection, Natural Environment Objective, number 2.). This zoning change will achieve exactly the opposite; it will provide for a very noxious use that nobody would like to live near or have their food grown near. In fact, the entity that plans to utilize this zoning change itself has said on many occasions, both publically and privately, that they do not wish to be sited next to residential areas and it is their stated company policy not to build plants close to residential areas. This zoning change would provide for industry that would produce large amounts of particulate, gaseous, and hazardous air emissions, create noise pollution, light pollution, and seriously threaten the groundwater. Uses deemed noxious “include uses such as: a. Meatpacking and slaughterhouses, b. Incineration, and c. Landfills.” The issue with these examples is exactly the same as the issues with the entity that is planning to utilize the zoning change: sights, smells, sounds, air pollution, and groundwater contamination. These attributes clearly adversely affect the health, safety, and welfare of the community and therefore cause people to not want to live near or have their food grown near these entities. This zoning change would clearly violate this section objective of the 2012 comprehensive plan.

It goes on to say under the Natural Environment Actions, number 3 shall be to “amend the Zoning Ordinance and the Subdivision Ordinance via the SmartCode to prohibit noxious uses within land annexed into the Urban Growth Boundary. To the extent possible, work with Jefferson County and the State to eliminate noxious uses from land that may be annexed by Ranson.” Action number 4 states: “Develop design guidelines for the land in the Urban Growth Boundary, based on both sound urban design principles and upon ecological and agricultural principles. For example, guidelines may cover which land to develop to what level, sightlines, and surveys of karst geology. These may become regulatory or advisory.” This demonstrates it is the expectation of the comprehensive plan that zoning will be used to not just deter but “prohibit” noxious uses within land annexed into the Urban Growth Boundary exactly like Jefferson Orchards. This zoning would violate these prescribed actions in the comprehensive plan and literally achieve exactly what the comprehensive plan is attempting to avoid.

3.3 Protecting Karst Areas and Water Resources

In chapter 4, section 4.5.1, Geology and Hydrology, on page 85, the comprehensive plan states in full the following:

“Ranson sits on Shenandoah carbonate bedrock with solution channels. These channels are the primary way precipitation gets into the water table. Percolation through the carbonate rock dissolves the rock and enlarges minute fractures. This has produced a karst geology, with caves, sinkholes, springs, ‘losing’ streams, and underground streams. Sinkholes are formed when the carbonate rock below the surface is eroded by water, and the surface collapses into a depression. These sinkholes provide an avenue for groundwater recharge. However, they can also sluice stormwater runoff or hazardous materials into the aquifer. Within the Urban Growth Boundary, the groundwater is as little as 25 feet below the surface.

Geology and Hydrology Objectives

1. Buffer any hazardous materials and proposed development and direct stormwater runoff, treated or untreated, from sinkholes. This may require a distance buffer. It may also require an engineered solution – depending on the geology and hydrology.

Geology and Hydrology Actions

1. Require adequate planning during the development of land. Given the nature of the karst geology, not to mention that of rivulets leading to streams, a one-size-fits-all approach should be avoided, in favor of sound engineering.”

This reveals an expectation from the comprehensive plan to consider the suitability of land based on its karst hydrogeology. Karst hydrogeology as explained above has high aquifer vulnerability leading to a high risk of groundwater contamination depending on the surface land use. In fact, a simple search of the peer reviewed scientific literature reveals that policy makers have been using “Aquifer Vulnerability”, to set land use and water resource protection policy for decades.¹

The guiding documents of the WVDEP recognize that industrial uses are not appropriate for these locations. In the guiding document supplied by the WVDEP *Stormwater Management Design in Karst Areas*, it states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”² This demonstrates an obvious desire by the WVDEP for local governments to take on the responsibility of limiting environmental impact through appropriate land use regulations and zoning. It is also clear the 2012 comprehensive plan intended to provide these protections.

The Chesapeake Bay Stormwater Network karst stormwater guidance document, the *CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed*³, which the WVDEP cites in its own guiding document, *Stormwater Management Design in Karst Areas*, clearly agrees stating:

“First, the effect of land development on karst terrain is complex and hard to predict, and requires professional analysis to reduce the risk of geological hazards, damage to infrastructure and groundwater contamination.”

“The working group acknowledges that past approaches to stormwater and land development in karst terrain have been inadequate to safeguard the public and the environment.”

“...there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”

We clearly need stronger comprehensive land use plans and zoning that direct new growth away from karst areas to more appropriate locations. Ordinance #2017-302 is literally the opposite of this.

This particular site of Jefferson County has mature karst hydrogeology with very high sinkhole development vulnerability⁴. The maps in Figure 1 show that the entire area in question is underlain by Conococheague or Stonehenge limestone commonly found in areas of advanced karst. In such landscapes, water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways (Figure 2).

Karst aquifers are known to be “extremely vulnerable to pollution,” due to direct connection between the surface and underlying high permeability aquifers.⁵ The site is on an upland area with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. This water is easily contaminated because of diffuse infiltration of surface water into the groundwater through the porous bedrock and point infiltration through sinkholes (Figure 3). The springs at the margins of the upland area are directly affected by the water quality throughout the aquifer (Figure 4).

The groundwater at this site is 60 feet or less below the ground⁶, and it is known from dye studies that this water moves through the ground and back to the surface relatively quickly. In a dye test, the USGS found that the water from just adjacent to this site emerged in the headwaters

of both the Elk's Run and Rattlesnake Run⁷ (Figure 5). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figure 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figure 6). One of the six springs that feeds the town run in Shepherdstown runs right through the middle of town where children play and learn to fish. The headwaters of Rattlesnake Run are a spring about 3.5 miles from the site and which is also a tributary of the Potomac River. These are just three of the examples the dye test demonstrated of how the groundwater at the site communicates with and affects the surface waters in the county. This site is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams.

Karst hydrogeology has very high "aquifer vulnerability" due to the diffuse and point infiltration⁸. Karst is known to have "severe ground instability problems"⁹. This makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater through point infiltration. As shown in Figure 2 sinkholes may develop quickly and the ground surface may show no signs of a sinkhole prior to collapse. The particular site is located in the area with the largest sinkhole density in Jefferson County (Figure 7).¹⁰

A study demonstrated that in this area, several factors increased the rate of sinkhole development, including presence of surface water and development. Therefore, the large weighty buildings, drastic changes in ground contour, and centralized stormwater management that is typically required by heavy industry will actually make the karst situation worse, causing karst features to develop and progress more quickly. This was exemplified by the current construction project, where 19 sinkholes developed thus far during construction. In the current owner's own geotechnical investigation report prepared for Thrasher Engineering by Specialized Engineering, it states the following:

"Some sinkholes failures can be induced by construction activities and are of significance because the sinkholes can directly affect the site being developed, either immediately or some years later. Construction activities that can trigger sinkholes include 1) diversion or impoundment of drainage or dewatering activities, 2) removal of overburden cover, 3) shock vibrations, such as blasting, and 4) increased loading.

Prediction of sinkhole location or occurrence is difficult, if not impossible, and there is always a significant degree of uncertainty associated with the occurrence of future sinkholes. Structures built within the area of influence of a sinkhole can also be affected by sinkhole collapse or subsidence.

By virtue of the underlying geologic formation, the Owner must acknowledge there is an inherent risk of potential ground subsidence or collapse associated with construction of structures in karst terrain. All sites in karst terrain have the potential for sinkhole formation."¹¹

Even a firm employed by industry recognizes the negative effects of development in karst and the dangers it imposes. The entity that is currently planning on utilizing the zoning change has taken every opportunity to use the minimum requirements and least expensive routes with little described understanding of or regard for our environment (please see attached written public comment and citizens petition to the DEP) This also demonstrates that we cannot trust industry entities to “do the right thing”. This is why appropriate zoning is so necessary. We can’t trust business to do what government should.

The Chesapeake Bay karst stormwater guidance document¹², which WVDEP cites in the *Stormwater Management Design in Karst Areas*¹³, clearly states “the working group notes that while communities that incorporate this guidance into their development review process can reduce the incidence of infrastructure damage and groundwater contamination, there is always some inherent risk when development occurs on this sensitive terrain. Consequently, the best local approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations”. These policies recognize some types of land use can increase the amount of surface contamination and that in combination with high aquifer vulnerability the likely hood of ground water contamination is much greater. This is why industry in such locations is so inappropriate.

The comprehensive plan is clear that the risk of hydrogeology should be taken into account when determining land use. The business entities cannot be expected to do the job of good zoning and land use regulations. The WVDEP does not have the power to do the job of good zoning and land use regulations. Therefore, the council cannot abdicate the duty of maintaining appropriate zoning that will protect the community and groundwater from inappropriate uses of land with karst hydrogeology and high aquifer vulnerability.

4. Land Use Objectives

Under land use objectives number ten states the following:

“10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community.”

Manufacturing and assembly-line facilities could have located in Ranson in this area as it is currently zoned. Additionally, with current zoning such entities would help Ranson achieve the remaining goals, objectives, and actions laid out in the comprehensive plan addressed above herein. Therefore, no zoning change is needed to accommodate manufacturing and assembly-line facilities. The proposed zoning change, however, is required to allow the particular manufacturing entity that is planning to utilize it and the desires of the current landowner. Unfortunately, this zoning change will also violate the entire second half of Land Use Objective number 10 as quoted above, and all of the goals, objectives, and actions of the 2012 comprehensive plan as discussed above.

4.1 Land Suitability

The land that is subject to this proposed zoning change is not just ill suited to this proposed use but completely inappropriate. The karst hydrogeology as detailed above makes this land totally ill-suited to this type of industry. The location is inappropriate as it is close to schools and neighborhoods. The entity that currently plans to utilize this zoning change will through its stormwater handling and air emissions pose great risk to the ground water and surrounding people and industry (see attached public comment to DEP, and Petition to DEP, and section 4.2 herein). By allowing this land to be used by this type of industry this zoning change would violate this section of the 2012 comprehensive plan of Ranson.

4.2 Adversely Affect Human Health

In the comprehensive plan of 2012 in Land Use Objective number ten states: the City “will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community.” In fact, the industry this zoning change will allow will be detrimental to the physical and mental health of humans living, working, going to school and even visiting the area. There will be downstream effects on personal and community economic, social and societal metrics. This zoning change would violate this land use objective.

Air pollution created by the industry this zoning change would provide for consists of both gaseous and particulate-matter pollutants. The gaseous includes nitrogen dioxide (NO₂), ozone (O₃ emitted as VOC and NO_x that interact to release O₃), and sulfur dioxide (SO₂). Particulate matter includes particulate matter of varying diameter, and classified by cutoff points — less than 10 μm (PM₁₀), less than 2.5 μm (PM_{2.5}), and that of more recent focus less than 0.1 μm (PM_{0.1}). Because of their small size, these particles can be inhaled deeply into the lungs and deposited in the alveoli. This particulate matter is a complex mixture of many things including metals, elemental and organic carbon. The PM_{0.1} have a higher carbon content, larger combined surface area (increasing contact area), and greater potential for carrying toxic compounds. While not usually measured, the other air contaminants referred to as hazardous pollutants are also very important as they contain among other things neurotoxins and carcinogens.¹⁴ Key drivers of the air pollutants are mining, smelting, and petroleum combustion. These are all processes undertaken or supported by the industry provided for by this rezoning.

Humans are exposed to air pollution through inhalation, ingestion, and contact with skin and mucus membranes. Children are especially vulnerable to the latter two since they are more likely to play on the ground outdoors and more likely to put things in their mouths. Air pollution is the most significant cause of pollution related disease (6.4 million deaths/year).¹⁵ This pollution increases the risk of multiple non-communicable diseases in children including asthma, low birth weight, cancer, birth defects, obesity, diabetes, cardiovascular disease, mental health problems and neurodevelopmental disorders, and increases the risk of chronic obstructive pulmonary disease, cardiovascular disease, stroke and cancer across the lifespan of a person exposed as a child.¹⁶ In fact in 2015 pollution was responsible for 21% of deaths from all cardiovascular disease, 51% of deaths due to chronic obstructive pulmonary disease (COPD), and 43% of deaths due to lung cancer.¹⁷

According to the National academy of science, Children are inherently more sensitive to the effects of air pollution for four distinct reasons.¹⁸

1. Children breathe more air on a per pound basis each day, thus increasing their exposure.
2. The pathways by which mammals detoxify and excrete toxic substances are not fully mature in children and thus less efficient.
3. There are periods in early development with exquisitely delicate developmental processes that are exceedingly sensitive to disruption, and exposure to even low doses of pollutants during this time can increase risk of disease in childhood and across one's lifespan.
4. Exposure in childhood leaves more years of life for diseases to develop that require longer times to develop (long latency period diseases).

Exposure to air pollution in early human development, especially exposure to fine particulate pollution, can be extremely deleterious to children's health and development.

4.2.1 Adverse In Utero Developmental Effects

Cells that make up the embryo and fetus (germ and fetal cells) divide and replicate rapidly and therefore are more sensitive to outside pressures from exposure to foreign substances and disruptions in cellular communications.¹⁹ When polluted air is inhaled some components may cross the blood-air barrier of the lungs into the circulation. The circulation carries them to the placenta. Some of these pollutants cross the placental barrier, affecting the embryo and depositing in the fetus creating permanent fetal abnormalities.²⁰ This leads to impaired organ development, disturbed development of the immune system, premature birth, lower birth weight, and increased infant mortality.²¹ These early changes lead to long-term effects including increased disease development in multiple organ systems throughout life, cognitive defects, achievement deficits, and negative psychological social and economic effects.²² Fetuses may also be affected by the socioeconomic status and life choices of their families both of which have been shown to be affected by air pollution their family members were exposed to (see below). Even worse there seems to be a generational effect, with offspring being affected by the air pollution to which their grandmothers were exposed.²³

4.2.2 Adverse Neurodevelopmental Effects

The central nervous system is increasingly recognized as being affected by air pollution. When particulate matter is inhaled, it may cross the blood-air barrier of the lungs into circulation. The circulation carries it to the brain where it has neurodegenerative effects or the placenta where it creates fetal abnormalities.²⁴ Effects on both the brain and fetus are certainly also effected by air pollution through secondary pathways.²⁵ Gestational exposure to air pollution and especially ultrafine particulate matter affect both embryonic neurodevelopment and brain growth and maturation in early life. Gestational exposure increases the risk of early cognitive deficits, low birth weight, prematurity, and neurodevelopmental disorders²⁶. An association between autism and prenatal exposure to particulate matter in air pollution has been suggested by several case-control studies.²⁷ A 2019 Study²⁸ looked at a

national sample of US children, evaluated the relationship between exposure to air pollution and cognitive outcomes. It found that annual and cumulative measures of air pollution during third grade were significantly associated with lower math test scores. This was likely attributable to exacerbation of asthma symptoms, other decreased health parameters, increased fatigue, or a direct neurodegenerative effect. Two earlier studies found similar outcomes for math and reading/English/language in elementary students exposed to elevated air pollutants including particulate matter, ozone, and nitrogen dioxide.²⁹ Air pollution has also been linked to several parameters with indirect effect on achievement and cognitive ability including school absences³⁰. Ample evidence for other structural and functional changes in the neurological system and neurodevelopmental progression exists in small studies, and animal models. As further studies are conducted, the impact of air pollution on these areas will be shown to be more devastating.

4.2.3 Adverse Respiratory Effects

The human respiratory system develops in utero, through adolescence, and does not actually stop until late teens early twenties depending on sex. The first 6 years of life represent the most extensive period of growth and account for 80% of development. This time period is therefore the most sensitive both because the lungs are developing rapidly and because they are not developed yet so the airways are narrower and there are fewer alveoli.³¹ Exposure to air pollution during the first 6 years of life can damage the lung tissue, impair lung growth, and alter the development of immune function and repair mechanisms within the lungs.³² These effects increase both short and long-term risk for asthma, chronic obstructive pulmonary disease (COPD), lung cancer, and respiratory infections.

Air pollution increases the rate of asthma development in both children and adults. Particulate matter, ozone, and sulfur dioxide contribute to allergic inflammation and pulmonary immune dysfunction in animal models, both strong contributors to asthma³³. Change in lung function is also seen with both short and long term exposure to air pollution in both children and adults. Air pollution not only causes increased risk of asthma, but even short term exposure causes asthma symptom exacerbation, significantly increasing the hospitalization, reduced lung function and increased airway responsiveness in asthmatic children.³⁴ A 2019 study found “Even within the limits set by the World Health Organization, the pollutants PM10, SO2, NO2, and O3 are associated with increased risk of treatment for respiratory diseases in children 0 to 6 years of age”. It is important to note that the US limits are set higher than the WHO, 300 % higher in the case of PM10!

While the development of COPD is most often associated with smoking, outdoor air pollution exposure increases the incidence or cases of COPD. Short term increases of PM10 and other air pollutants can cause existing cases of COPD to get worse, increasing the risk of acute exacerbation, hospitalization, and death from COPD symptoms in patients that already suffer from COPD.³⁵

Smoking is considered the largest cause of lung cancer, however the International Agency for Research on Cancer designated outdoor air pollution and PM as a Class I human carcinogen³⁶. Numerous studies have shown that increased exposure to PM_{2.5}, SO₂, NO₂, and diesel exhaust cause an increased incidence or risk for multiple types of lung cancer.³⁷

While not as extensively studied, it is clear from the studies that do exist that children, the elderly and those with pre-existing conditions are made more susceptible to developing exacerbated respiratory infection symptoms and increased need for emergency intervention when exposed to air pollution.³⁸

4.2.4 Adverse Immune Effects and Autoimmune Consequences

Immune development starts in utero and continues through the first several years of life; disruption in this process can cause autoimmune diseases. Autoimmune diseases are on the rise in developed countries. Studies have shown that oxidant air pollutants, ozone and nitrogen dioxide were associated with an increased risk of incident asthma and eczema in children.³⁹ Both of these diseases are autoimmune diseases and represent inappropriate immune tolerance development. Furthermore, a review of 36 experimental studies revealed that particulate matter, diesel exhaust particles and ozone fundamentally changed cytokine (cell communication tool or molecule) production and cell functions inducing airway hyperresponsiveness and increasing susceptibility to infection and allergies.⁴⁰ Therefore air pollution contributes to and increases the rate of autoimmune diseases affecting several body systems and increases susceptibility to further morbidity (disease). This is one of the reasons the 1918 flu hit Pittsburg so hard. The appropriate cellular communication and immune response had been disrupted by chronic air pollution exposure leaving people's lungs ill-equipped to deal with the virus. In fact, the hypersensitivity likely made the situation worse.

4.2.5 Adverse Effects on other body systems

Air pollution has deleterious effects on several other organ systems including cardiovascular, endocrine, blood and overall health parameters like weight. Studies have shown increased risk of obesity linked with exposure to air pollution.⁴¹ Many studies have also demonstrated the association of air pollution with increased risk for insulin resistance and diabetes, high blood pressure, high cholesterol, stroke, and other cardiovascular and cardiometabolic diseases.⁴² An elevated level of anemia is seen in children exposed to elevated air pollution.⁴³

4.2.6 Adverse Psychological Effects

A review of 178 published articles systematically examined the psychological (affective, cognitive, behavioral), economic, and social effects of air pollution found: "Affectively, air pollution decreases happiness and life satisfaction, and increases annoyance, anxiety, mental disorders, self-harm, and suicide. Cognitively, it impairs cognitive functioning and decision making. Behaviorally, air pollution triggers avoidance behavior, defensive expenditure, and migration as coping strategies. Economically, it hurts work productivity and stock markets. Socially, it exacerbates criminal activities and worsens perception of the government. Importantly, both actual and perceived air pollution levels matter."⁴⁴

4.2.7 Adverse Economic Effect Secondary to Human Health Effects

These health risks would endanger two of our most valuable resources: our people and our future. Labor is essential to the economy. Through negative health effects, air pollution has been demonstrated to have a negative effect on labor supply, productivity and economic growth.⁴⁵ A 2012 study demonstrated a significant direct effect of air pollution on agricultural worker productivity; with a 10-ppb change leading to a 5.5 % drop in worker productivity.⁴⁶ The study found this conclusion could be applicable to all outdoor workers. Because of our agricultural, equine, and tourism industries, Jefferson County has a huge outdoor workforce. Effect of labor supply and productivity are not limited to outdoor workers and or physical labor.⁴⁷ As children struggle during their education with attendance, attention, and socialistic ability due to the effects of air pollution on their health, their achievement suffers. As achievement suffers they are less able to achieve the training needed to achieve a good, well-paying job. Their lifetime earnings and overall wealth will suffer. They will consequently own less property and pay less taxes of all types. The effects of air pollution on human health will lead to decreased economic activity and government income, thereby depressed the local economy. Environmental protection should be seen as an investment in economic growth through advancement of quality labor availability capability and increased productivity.

4.2.8 Inappropriate to rely on the NAAQS alone to protect communities

The City of Ranson cannot simply rely on the EPA regulations to keep children and families in nearby schools and communities safe from the effects of air pollution. In fact, in 2019 the Independent Particulate Matter Review Panel (formerly U.S. EPA Clean Air Scientific Advisory Committee Particulate Matter Review Panel) on EPA's Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter stated that the committee unanimously and unequivocally found that the current primary annual and 24-hour PM_{2.5} National Ambient Air Quality Standards (NAAQS) were not adequate to protect public health. The advice from this 20-member committee, whose scientific disciplines include epidemiology, medicine, toxicology, air quality measurement, air quality modeling, exposure assessment measurement and modeling, risk assessment, statistics, and others, was ignored due presumably to political pressure. Not only are the NAAQS too high in some cases but due to the measure and mechanism by which they work they cannot replace the safety provided by good land use and zoning regulations, that are intended to do things like keep factories with air emissions and hundreds of heavy trucks away from elementary schools. In fact, there is a state law that prohibits siting a school near a factory. Unfortunately, the reciprocal law does not exist. Clearly just like with the water resources we cannot rely on the DEP or the EPA to do the job of what appropriate zoning should do. The whole point of zoning is to keep people safe and provide for their health and welfare. Ordinance #2017-302 puts families and school children directly in harm's way.

An editorial in the *New England Journal of Medicine*, commenting on several recent studies, stated: "The best control strategy from the standpoint of human health, supported by the scientific evidence to date, is to reduce the levels of all types of air pollutants. Our children's health depends on it."⁴⁸ The *Lancet* Commission on Pollution and Health citing many sources⁴⁹ found that prevention of non-communicable diseases will require pollution prevention and that this will require fundamental changes in societal patterns of production, consumption, and transportation. This will require a paradigm shift to a more sustainable economic model based on

recognition of human rights, especially the right of children to health and well-being.⁵⁰ This is a major unexploited opportunity in in society that many communities are grappling with undertaking. This rezoning would represent a major step in the wrong direction in this respect. There is substantial and overwhelming evidence that this zoning change would violate the Land Use Objective number 10 of the 2012 comprehensive plan of Ranson by adversely affecting the health of the community.

4.3 Adversely affect the welfare of the community

Tourism, agriculture, and the equine industry are the largest industries in Jefferson County and have all played an important role in our economy for hundreds of years.

Jefferson County has always recognized and supported these key industries and, as a result, we have always had what the remainder of the country is now striving to achieve: a local economy based on productive, sustainable business. Across the country, considerable effort is now being expended to promote and support these types of industries, as their exponential benefit to the local and regional economies is only now being fully realized. Heavy industry in the heart of Jefferson county will have detrimental effects on these traditional, sustainable industries. It simply does not make sense to allow the degradation of industries widely recognized to be foundational elements of an adaptable, enduring economy by inviting into Jefferson County the culprit of this degradation and a symbol of a bygone era: heavy industry.

Heavy industry as a goal for job creation is a solution of the past. We are more than 100 years beyond the days of J.P. Morgan, Carnegie, and Rockefeller. The acknowledgement of this shift is clearly expressed in Ranson's Comprehensive Plan which states, "the end of Ranson's traditional industrial period was signaled by the closure of AB&C Corporation, Dixie Narco and the Kidde Foundry (Badger Powhatan)." This statement demonstrates that heavy industry is no longer desired in Ranson. The current Comprehensive Plan prioritizes open space, local agriculture, and quality of life. The plan further outlines how industries like tourism, agriculture, and equine industries are essential to ongoing economic development in Ranson. Heavy industry has numerous negative effects on these industries and it is incompatible with the goals we are striving towards. Heavy industry should not be provided for in Jefferson County zoning regulations.

The tourism, agriculture, and equine industries are synergistic. They support, protect, and promote one another in ways that create long-term stability and profitability in our local economy. Through pasture and crop land, the equine and agricultural industries enable profitable maintenance of the bucolic landscape that draws tourists to Jefferson County. The equine industry provides evening entertainment for tourists while the agriculture industry provides local products increasingly sought after by tourists. The tourism industry, in turn, provides customers and markets to both the equine and agricultural industries. But it is so much more than that. There are countless examples of deep interdependences and symbioses. The equine industry brings outside money into our economy in the form of out-of-state owners and breeders, creating jobs for Jefferson County's equine industry. The attractive nature of the county, as well as the quality and accessibility of accommodations, makes Jefferson County an even more desirable location for out-of-state equine investors. In many ways like this, the equine, agricultural, and

tourism industries work hand in glove to bring money into our states, create jobs, and grow our local economy.

The tourism, agriculture, and equine industries are large conglomerates of small businesses. This structure provides a multitude of economic benefits over an economy based on a small number of large businesses, as is commonly the case in heavy industry. Professor of Agricultural and Regional Economics at Penn State and Director of the Northeast Regional Center for Rural Development, Dr. Stephan Goetz, was quoted in a recent article⁵¹ saying, "Small, locally owned businesses and startups tend to generate higher incomes for people in a community than big, non-local firms, which can actually depress local economies." Small businesses create jobs, cultivate innovation, and provide opportunities for individuals that would otherwise not exist, while large businesses' concentration on efficiency and increasing profitability decreases job count and stifles innovation and individuality. Goetz went on to say "We can't look outside of the community for our economic salvation. The best strategy is to help people start new businesses and firms locally and help them grow and be successful." This concept was supported by a recent WVU study⁵² on the economic outlook for the Eastern Panhandle in which they found that Jefferson County's per capita income was \$8,800 per year above that of Berkeley county. This difference was attributed in part to Berkeley County's job growth over the last several years coming from large companies such as P&G and Macy's, whereas Jefferson County's came from commuters and local small business. These local agriculture, tourism, and equine industries set our community apart. They support small businesses and startups and, in doing so, encourage the growth of better-paying jobs that are so valuable to our local economy.

Local economies that welcome and support small businesses are flexible and agile in times of crisis.⁵³ Small businesses have been shown to be capable of reacting to severe, sudden changes like medical epidemics. Recent events have shown us just how important that is. On the other hand, turbulence and uncertainty have been shown to be the leading causes for failure in manufacturing businesses such as heavy industry.⁵⁴ In these businesses, a concentration on efficiency and lean operations has led to an inability to adapt to change.^{55 56} Agility and flexibility are as important now as they have ever been. Heavy industry will introduce rigidity and threaten the small businesses that provide agility and flexibility to our economy.

Local food production provides a safety net in times of food instability. Recent events have revealed how the drive for lean efficiency and profitability in our food supply chains has left communities vulnerable to food shortages. The current situation highlights the value of the local, sustainable food production that we are fortunate to already enjoy here in Jefferson County as a result of our local agriculture industry. As mentioned above, the equine and tourism industries support the maintenance of the agricultural land needed for this food production. As a community, we should always be moving toward resiliency and agility in our economy and food supply not away from it.

Large companies involved in heavy industry not only hurt our economy directly but also harm industries that have been pillars of our economy for hundreds of years. Check out how heavy industry in this area of Jefferson County will damage each of these industries in the other fact sheets of this series.

4.3.1 Adverse Effects on Tourism

Tourism is critically important to Jefferson County's economy. Much of the success of Jefferson County's tourism industry can be credited to the bucolic scenery of farm land and pastures, natural resources, rich history, the thoroughbred industry and the race track and casino. These key elements support and enable other aspects of our tourism industry like agro-tourism, farmer's markets, and scenic hiking trails. Rezoning at the site in Ranson will allow for the type of industry that negatively impacts these elements that encourage tourism in Jefferson County. The resulting harm to our tourist industry will surely drive away visitors and decrease personal state, county, and local revenue.

According to a 2019 study⁵⁷ by the West Virginia Tourism Office, Jefferson County generated more tourism-derived revenue for state and local governments than any other county in West Virginia in the last 10 years. State and local government revenue from sales tax, fuel tax, hotel tax, and other travel-related spending averaged over \$178 million per year in the preceding decade, totaling almost \$1.8 billion. Over the last 10 years, no other county in West Virginia generated even half of this level of revenue from tourism. West Virginia businesses and our local economies also benefit from tourist spending. In 2018, tourism generated \$213.7 million in individual earnings and \$842.6 million in direct spending in Jefferson County.

It is important to note that most of the money generated by tourism in Jefferson County comes from neighboring states. The tourism industry is not simply recycling local dollars but actively bringing in money from biotech economy of Maryland, hi-tech economy of northern Virginia, and political economy of DC and use it to power our own and that of our state. The powerful draw of our local tourism industry allows Jefferson County to harness the success of neighboring areas and direct it back into our own local economy.

One of the important drivers for tourism in Jefferson County is the Appalachian Trail. According to the Appalachian Trail Conservancy, Harpers Ferry is the psychological midpoint of the Trail. Hikers often plan extended stays in Jefferson County, which creates an obvious positive for our tourism industry. Open vistas and human impact on the environment were found to be among the elements most often perceived and listed as having an effect on the visitor's experience on the Appalachian Trail.⁵⁸ A study by Kaplan found that points of interests and views drew visitors' attention and had a significant impact on their perception of the trail.⁵⁹ It was also found that particularly beautiful vistas helped visitors overlook elements that usually have a negative effect on trail experience like increased trail traffic. Another study published in *Leisure Sciences* revealed that scenic value was a perceptual theme of Appalachian Trail visitors, and that things as simple as dead trees visible in a vista can have a negative impact on visitors' overall perception.⁶⁰ The introduction of industrial activity made possible by the proposed rezoning in Ranson would have a negative effect on the scenic views of unspoiled landscape from the Appalachian Trail in Jefferson County. For example, the smokestacks and associated lights at the Rockwool plant in Ranson will be visible from 15 vistas on the Appalachian Trail (Appalachian Trail conservancy), 3 of the 5 main entrances into the county, and both of the main driving routes used by tourists. Multiple studies show that the perception of pollution is correlated with stress, annoyance, and symptoms of depression.^{61 62} The presence of large industrial installations in

Jefferson County's viewshed will diminish the appeal our natural landscape has to Appalachian Trail tourists and any other potential visitors driving through our county.

Perceived air quality is another feature that attracts tourists to Jefferson County. Air pollution associated with smokestacks will therefore have a negative effect on tourists' desire to visit Jefferson County. Fine mode (0.1-2.5um) particles are associated with air pollution caused by the burning of fossil fuels and gas-to-particle conversion of pollutants such as sulfur dioxide, nitrogen oxides, and volatile organic compounds. These particles remain in the atmosphere for days to weeks and alter the appearance of the atmosphere by scattering and absorbing solar radiation. The ultimate outcome of this type of air pollution is regional haze.⁶³ The effect of regional haze on tourists was explored in a review article published in the *Atmospheric Environment* titled "Impaired visibility: the air pollution people see." A key takeaway on the negative affect of haze on vacationing tourists was summarized as follows:

"Vacations offer an escape from the routine and stress of our daily lives. Vacation destinations are often chosen based on their scenery; vacations are spent gazing at monuments, mountains, clouds, and oceans. Good visibility allows clear observation of distant features and appreciation of the inherent beauty of these scenes...Air pollution, which is often present in both our cities and parks, interferes with these attributes and can ruin the views vacationers travel to enjoy."

People seek bucolic, unspoiled areas to escape the stresses of urban areas. Perceived pollution in urban areas causes stress while viewing natural scenes has both psychological and physiological benefits.⁷⁶⁴ The combination of smokestacks and haze will mar the viewshed in Jefferson County which will not only reduce the positive effects of a scenic landscape but also leave tourists disappointed and dissatisfied with their choice of destination.⁶⁵

Allowing the zoning change at the site in Ranson also risks Jefferson County's reputation of having environmental-friendly, sustainable industry. Empirical studies show that qualities associated with sustainability have a positive impact on the competitiveness of a tourism destination. In fact, sustainability factors are often one of the most influential factors for determining competitiveness for tourist destinations.⁶⁶ The sight of smokestacks disgorging particulate matter into a hazy landscape is unlikely to evoke thoughts of sustainability in visitors driving into the county or gazing out from the Appalachian Trail. This type of industrial activity is at odds with the pastoral image cultivated by our local farmland, farmers' markets, and fruit and vegetable stands.

There are certain factors that have been shown to be associated with successful development of rural tourism.⁶⁷ These factors include having a complete tourism package, good leadership, and support and participation from local government. Focus group participants from successful communities have noted that zoning and other local activities were most important to making communities attractive to tourists. In less successful communities, a lack of appropriate zoning and cooperation between local governments, led to eyesores and unattractive environments. Focus group participants from successful communities also cited good leadership, in the form of people who understood the importance of tourism, as crucial to the success of tourism. The support and participation of local government was also found to be important to the success of

tourism in these communities. The most important factors were described to be zoning and maintenance of the community

By rezoning this area of the county, Ranson is demonstrating that it does not have an understanding or concern for the detrimental effect this action would have on tourism in surrounding municipalities. This lack of communication and cooperation with neighboring areas is unfortunately the type of behavior associated with communities that have less success in developing and maintaining local tourism industries. Ranson needs to understand that the actions it takes here will affect tourism in every municipality throughout the county. Rezoning would allow the type of industry that would dramatically reduce Jefferson County's appeal to visitors and have a negative impact on the success of our local tourism industry. The only way to realize the full potential of Jefferson County's tourism industry is for local governments to work together to make coordinated and sustainable decisions about zoning.

4.3.2 Adverse Effects on Equine Industry

Ranson's proposed zoning change presents a significant risk to the equine industry in Jefferson County. The type of industry that would be allowed by the proposed zoning change in this location would jeopardizes horse health and threaten the long-term viability of the equine industry in the county.

The site of the proposed rezoning is less than six miles from Charles Town Races, a thoroughbred track with a year-round meet. There are also several breeding, training, and rehabilitation farms and facilities within the six-mile radius of the site in Ranson. Industrial activity typically emits a multitude of hazardous air pollutants capable of dispersing to sites several miles away, even when plants comply with permitted limits. It is therefore likely that pollutants from industrial activity at the proposed site in Ranson will have the potential to affect horses stabled several miles away.

Horses appear to be more sensitive to inhaled particulate matter than humans. According to a recent study published in the *Journal of Veterinary Internal Medicine*⁶⁸, horses are 15 times more sensitive to inhaled particulate matter than humans. Inhaled particulate matter can cause inflammation in horses that negatively affects performance even at subclinical levels i.e. levels undetectable without advanced diagnostics. Inhaled particulate matter is also a known contributor to the development of inflammatory airway disease (IAD)⁶⁹. IAD is a chronic airway disease that can affect horses long after their racing career is over. According to the West Virginia Department of Environmental Protections (WVDEP) air permit, the Rockwool plant in Ranson is permitted to emit 250.87 tons of particulate matter per year into the air⁷⁰.

While there is little research on how specific air pollutants affect horses, there are several observations that can be made on the effects of pollution on humans to infer potential impact on horses. Horses exposure times to pollutants are much longer when compared to typical human models because horses live outside. Horses that are housed near the site in Ranson and worked in this area year-round will also be continually exposed to air pollution. Additionally, horses must perform at maximal intensity exercise while typical models looking at human sensitivity to

pollution are not done at maximal exercise. These comparisons suggest that horses will likely experience detrimental effects at lower levels of air pollution than humans.

The primary concern about air pollution is that increased levels of pollutants will increase inflammation in horses' lungs. Even small, subclinical amounts of inflammation in the lungs of horses negatively affect performance⁷¹. This inflammation can also cause increased recovery times following racing⁷². Reduced performance and training interruptions can lead to higher risk of injury, reduced winning average, fewer yearly starts, lower yearly earnings, shortened career length, fewer lifetime starts, reduced lifetime earnings, and reduced quality of life⁷³. Each of these situations will lead to decreased return on investment, decreased cash flow, and decreased overall earnings for owners, trainers, and breeders with horses at Charles Town Races and in nearby areas.

While racing is usually a thoroughbred's first career, it is rarely their last. Some racing horses go on to be breeding stock, while others will have successful careers as sport horses. However, if they are unsound from injury or respiratory disease, they can be difficult to manage as breeding stock or unfit for a career as a sport horse. This affects the horse's quality of life and also places a burden on the industry by reducing the lifetime productivity of each horse.

Another concern related to the proposed rezoning in Ranson is the risk of groundwater contamination as a result of industrial activity. If local groundwater becomes contaminated, owners will not know until their animals are sick. Symptoms are likely to be non-specific and insidious in onset, and the underlying cause may be difficult to determine without extensive veterinary intervention. It may even become necessary for horsemen to periodically test water sources to determine if they are contaminated. All of this adds expense and uncertainty to an industry that already deals with large inherent risks.

The actual occurrence of groundwater contamination would be devastating for Jefferson County's equine industry. Breeding, raising, training, and even maintaining horses would be absolutely cost prohibitive on utility-provided water. For both geographic and financial reasons, it is simply impossible to think that the industry could use public or private utility-provided water if industrial activity fouled the local groundwater.

The equine industry in Jefferson County is hundreds of years old. It is not worth risking this historic and economically valuable industry by rezoning for industrial companies like Rockwool. An economic impact study of the Charles Town Thoroughbred Horse Racing Industry on Jefferson County's economy found that the spending by owners, breeders, and trainers of the equine industry directly contributes \$79.4 million to the county each year. Out-of-state owners, breeders, and trainers spend more than \$50 million in Jefferson County every year. The value of total business volume in Jefferson County is \$191 million each year⁷⁴. These numbers do not include the effect of the handle (betting) or the casino which totals over \$63 million per year. Rockwool promises it will provide 120 jobs (WVEDA bond agreement of May 2019).

The equine industry offers so many benefits that the industry in the rezoned area would not. For example, the equine industry supports local agriculture by providing a market for agricultural goods such as straw. The robust straw market supported by owners, trainers, and breeders allows

for a third cash crop to be produced from one field in a year. This symbiotic relationship is an example of how local consumption of locally produced agricultural products has multiplicative benefits to the local economy⁷⁵. Through pastureland and support of local agricultural goods, the equine industry protects and preserves the open spaces that give our county its bucolic quality and help attract tourists. Through the breeders' incentive programs, the equine industry offers unique opportunities to draft state funds back to Jefferson County. Through the handle, its support of local agriculture, its stewardship of pastureland, and its enabling of spending by owners, breeders, trainers, the equine industry brings in tens of millions of dollars from outside the state into Jefferson County each year.

The equine industry provides jobs for a broad cross-section of the public. This industry offers individuals of any educational background a variety of paths to achieve a good middle-income living. Many jobs allow individuals to pursue apprenticeships or on-the-job training rather than requiring a costly college education. This flexibility allows for greater lifetime earnings and improved educational debt-to-earnings ratio for these workers. The equine industry's support of on-the-job education is yet another example of how Jefferson County has already embraced practices only now being recognized and promoted in the rest of the country. The equine industry also provides opportunities for non-traditional workers by offering job opportunities to those who may not be employable by larger corporations. This industry provides a variety of fulltime, part-time, flexible, and pick-up work. Encouraging this type of flexible job ecosystem helps create a healthy economy with broad participation in employment and consumption.

Rezoning this area of Jefferson County for Special District Industrial will allow in entities whose activities are harmful to our equine industry. The losses incurred by the equine industry would far outweigh any benefits derived from industries occupying the rezoned area. Sacrificing the long-term viability of one of our oldest and most productive industries for a net loss in business volume and economic value just does not make good sense for the Jefferson County economy.

4.3.3 Adverse Effects on Agriculture

Agriculture has been part of our economy and way of life in the Shenandoah region of the Great Valley for over 270 years. This industry has continued as a robust part of our economy since those days. At one point being known as the breadbasket of early America, what is now Jefferson County has excellent fertile soil. The early settlers followed the Great Valley down from New Jersey and Pennsylvania to the Shenandoah Valley for precisely this reason.

Unlike the bygone era of heavy industry, local agriculture and local consumption of agricultural goods are a boon to our local economy. According to the 2012 agricultural economy report, West Virginia had over \$806 million in agricultural sales. Jefferson County is among the top 10 counties in the state, for sales in every major commodity group. There were \$668 million in sales from animals and animal products in West Virginia, and Jefferson County was in the top 9 counties for animal and animal product sales. Field crops represented \$106 million in sales in the state and Jefferson County was the second highest producing county with more than \$10 million in sales. Jefferson County is the third highest county for vegetables and fruit sales with over 1.9 million in sales of the states 32 million in sales (Figure 8)⁷⁶.

Agriculture supports other local industries well beyond just supplying customers in the form of their employees. Agriculture supports tourism through agro-tourism, supports the bucolic nature of our county by preserving beautiful open spaces, and provides the locally produced agriculture goods many tourists are looking for in our markets and restaurants. Agriculture helps maintain the way of life many of the commuters who choose to live in Jefferson County enjoy. Agriculture supports the equine industry in a multitude of ways by providing local products like hay and straw, helping maintain pasture land, co-supporting local dual purpose retail stores, and helping recycle by products. Heavy industry could never achieve these things.

The industry that this zoning change in Ranson will provide for in this location has the potential to devastate the agricultural industry in our county. First, the air pollution associated with heavy industry causes decreased yields of both quantity and quality for several of the crops important to Jefferson County including winter wheat and soybeans⁷⁷. As yields decline for locally consumed crops like straw (from winter wheat) used in the equine industry, prices rise hurting both the producer and the consumer. Far more devastating is the possibility of ground water contamination. As explained in a separate fact sheet in this series, the hydrogeology in this location causes a very high level of groundwater aquifer vulnerability. Because of the large amount of pollution that heavy industry produces, the combination of these two factors makes the likelihood of groundwater contamination in this location very high. Agriculture in Jefferson County depends on groundwater. Without high quality groundwater, the management of livestock would be absolutely cost prohibitive in Jefferson County.

From the hardships of decreased yield to the devastation of ground water contamination, the industry that this zoning change in Ranson will provide for will negatively affect the agriculture industry in Jefferson County. Agriculture is a historic industry in Jefferson County that plays an important part in our economy and society that could not be replaced by heavy industry.

4.4 Adversely affect the safety of the community and region

This zoning change would adversely affect the water resources for a majority, including major industries, and municipalities. It would also endanger the water resources of northern Virginia and Maryland.

As described above in a dye test, the USGS found that the water from just adjacent to this site emerged in the headwaters of both the Elk's Run, Rattlesnake Run and one of the 6 springs that feeds the Town Run in Shepherdstown.⁷⁸ (Figures 5 and 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figures 5 and 6). The Elk's Run headwaters is a spring about three miles south east of the site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Figures 5 and 6). The Town Run runs right through the middle of town where children play and learn to fish. The headwaters of Rattlesnake Run are a spring about 3.5 miles from the site and is also a tributary of the Potomac River. These are just three of the examples the dye test demonstrated of how the groundwater at the site communicates with and affects the surface waters in the county. This site is in the Rocky Marsh Run watershed, which is in the source water

protection zone for Shepherdstown and drains to the Potomac River. Therefore, activity at this site will affect both groundwater and surface water streams.

A great majority of people in Jefferson County rely on ground water for their water needs. Most of these people rely on personal well water. Our equine and agriculture industries also rely on groundwater. The Potomac River provides water to many communities downstream including a million gallons a day for Frederick and 40 million gallons a day to Loudoun. The combination of the effects on ground and surface water will endanger the drinking water for tens to hundreds of thousands of people. This is a huge safety concern and means that this zoning change would undoubtedly adversely affect the community.

5.0 Community Engagement

In several locations throughout the Comprehensive Plan public engagement is mentioned. An example is on page 33 under Community Design Objectives and states: "Engage the whole community in planning constructively. While the needs of particular stakeholders and neighboring property owners must be considered, projects should be planned with the wider community in mind." This was clearly not achieved in the process. The neighboring property owners were not included in this process and had no idea the nature of the entity being zoned for in this location.

6.0 Environmental Discrimination and Human Rights

The area surrounding the location, of the proposed zoning change that, is historically lower income and underserved. Deciding to locate a tract of such zoning in this location when it is on the whole unwanted and totally inappropriate for the land and surroundings is an example of environmental injustice. The Lancet Commission on Pollution and Health, citing the United Nation's Universal Declaration of 1948 on Human Rights, found that "pollution threatens fundamental human rights - the right to life, the right to health, the right to well-being, and the rights of the child." This rezoning represents not only a bygone era of economic development but also a bygone era of environmental injustice and human rights violation.

The Lancet Commission on Pollution and Health further found that prevention of non-communicable diseases will require pollution prevention and that this will require fundamental changes in societal patterns of production, consumption, and transportation. This will require a paradigm shift to a more sustainable economic model based on recognition of human rights. They also found this is a major unexploited opportunity in society that many communities are grappling with undertaking. The movement away from the smart code zoning, with it integrated walkable communities, to large tracts of land dedicated to polluting industry close to a title one school is the exact opposite of this. This rezoning would represent a major step in the wrong direction for disease prevention, human rights, Ranson, and Jefferson County!

7.0 Conclusion

This zoning change will violate the intention of the comprehensive plan of Ranson to provide ample affordable housing in complete communities that will allow residents to live, work, and

shop in the same community. Instead, it will promote replacing them with a single-use area that would be a separate pod of land use. This zoning change will also allow land to be used for industry that it is totally inappropriate and ill-suited to, endangering the water resources and water safety. Through its air emissions, effects on local industry, and water quality the industry this zoning will provide for will adversely affect the health, safety and welfare of the community. This zoning change adds no additional advantage to the residents of Ranson and violates the comprehensive plan in several key areas working in contrast to the goals, objectives and actions of the comprehensive plan. This will result in consequences that were intended to be prevented by the comprehensive plan. Please vote NO zoning ordinance #2017-302.

Sincerely,

Susie Wimer

¹ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

² Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4

³ CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009

⁴ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area*, US GEOLOGICAL SURVEY, 1991

- Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.
- Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. *Field Guides*. 2015 Sep 1;40:425-84.
- Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).
- ⁵ Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. *Earth-Science Reviews*. 2014 Nov 1;138:61-88.
- Ford D, Williams PD. *Karst hydrogeology and geomorphology*. John Wiley & Sons; 2013 May 3.
- Zhou W, Beck BF. Engineering issues on karst. In *Karst management 2011* (pp. 9-45). Springer, Dordrecht.
- ⁶ Carpenter DL, Connelly DT, M Innis. Project Shuttle, Site Characterization Report VRP (Volunteer Remediation Plan) Parcel Jefferson Orchards Site. Environmental Resources Management. 2017 Sept.
- ⁷ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area, US GEOLOGICAL SURVEY*, 1991
- ⁸ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.
- ⁹ Doerfliger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). *Environmental Geology*. 1999 Dec 1;39(2):165-76.
- ¹⁰ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.
- Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. *Field Guides*. 2015 Sep 1;40:425-84.
- Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).
- ¹¹ Project Shuttle -New Industrial Site at the former Jefferson Orchard Kearneysville, Jefferson County, West Virginia Specialized Engineering Project No. 177164, Specialized Engineering 4845 International Blvd, Suite 104 Frederick, MD 21703, July 11, 2017
- ¹² CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009
- ¹³ Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4
- ¹⁴ Kyle AD, Wright CC, Caldwell JC, Buffer PA, Woodruff TJ. Evaluating the health significance of hazardous air pollutants using monitoring data. *Public health reports*. 2001;116(1):32-44.
- ¹⁵ Health Effects Institute (HEI) and Institute for Health Metrics and Evaluation (IHME), d. State of global air – 2018. Available at: <https://www.stateofglobalair.org>.
- ¹⁶ Landrigan PJ, Fuller R, Fisher S, Suk WA, Sly P, Chiles TC, Bose-O'Reilly S. Pollution and children's health. *Science of The Total Environment*. 2019 Feb 10;650:2389-94.
- World Health Organization (WHO), 2018. *Inheriting a Sustainable World? Atlas on Children's Health and the Environment*. WHO, Geneva Available at: <http://www.who.int/ceh/publications/inheriting-a-sustainable-world/en/>
- Barker, D.J., 2004. The developmental origins of adult disease. *J. Am. Coll. Nutr.* 23 (588S– 95S).
- ¹⁷ Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., N, Basu, et al., 2017. The Lancet Commission on pollution and health. *Lancet* [https://doi.org/10.1016/S0140-6736\(17\)32345-0](https://doi.org/10.1016/S0140-6736(17)32345-0).
- ¹⁸ National Academy of Sciences, 1993. *Pesticides in the Diets of Infants and Children*. National Academies Press, Washington, DC.
- ¹⁹ Leibel S, Post M. Endogenous and exogenous stem/progenitor cells in the lung and their role in the pathogenesis and treatment of pediatric lung disease. *Front Pediatr* 2016;4:36.

- ²⁰ Boda E, Rigamonti AE, Bollati V. Understanding the effects of air pollution on neurogenesis and gliogenesis in the growing and adult brain. *Current Opinion in Pharmacology*. 2020 Feb 1;50:61-6.
- ²¹ Korten I, Ramsey K, Latzin P. Air pollution during pregnancy and lung development in the child. *Paediatric respiratory reviews*. 2017 Jan 1;21:38-46.
- ²² Kajekar R. Environmental factors and developmental outcomes in the lung. *Pharmacol Ther* 2007;114(2):129–45.
- ²³ LiY-F, LangholzB, SalamMT, GillilandFD. Maternal and grandmaternal smoking patterns are associated with early childhood asthma. *Chest* 2005;127(4): 1232–41.
- ²⁴ Boda E, Rigamonti AE, Bollati V. Understanding the effects of air pollution on neurogenesis and gliogenesis in the growing and adult brain. *Current Opinion in Pharmacology*. 2020 Feb 1;50:61-6.
- ²⁵ Block, M. L., & Calderón-Garcidueñas, L. (2009). Air pollution: Mechanisms of neuroinflammation and CNS disease. *Trends in Neurosciences*, 32(9), 506–516.
- ²⁶ Calderón-Garcidueñas L, Leray E, Heydarpour P, Torres-Jardón R, Reis J. Air pollution, a rising environmental risk factor for cognition, neuroinflammation and neurodegeneration: the clinical impact on children and beyond. *Revue neurologique*. 2016 Jan 1;172(1):69-80.
- Perera FP. Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change. *Environmental health perspectives*. 2017 Feb;125(2):141-8.
- Woodruff TJ, Darrow LA, Parker JD. Air pollution and postneonatal infant mortality in the United States, 1999–2002. *Environmental Health Perspectives*. 2008 Jan;116(1):110-5.
- Jacobs M, Zhang G, Chen S, Mullins B, Bell M, Jin L, Guo Y, Huxley R, Pereira G. The association between ambient air pollution and selected adverse pregnancy outcomes in China: a systematic review. *Science of The Total Environment*. 2017 Feb 1;579:1179-92.
- ²⁷ Lyall K, Schmidt RJ, Hertz-Picciotto I. Maternal lifestyle and environmental risk factors for autism spectrum disorders. *International journal of epidemiology*. 2014 Apr 1;43(2):443-64.
- Rossignol DA, Genuis SJ, Frye RE. Environmental toxicants and autism spectrum disorders: a systematic review. *Translational psychiatry*. 2014 Feb;4(2):e360-.
- Ornoy A, Weinstein-Fudim L, Ergaz Z. Prenatal factors associated with autism spectrum disorder (ASD). *Reproductive toxicology*. 2015 Aug 15;56:155-69.
- ²⁸ Shier V, Nicosia N, Shih R, Datar A. Ambient air pollution and children’s cognitive outcomes. *Population and Environment*. 2019 Mar 15;40(3):347-67.
- ²⁹ Ham JC, Zweig JS, Avol E. Pollution, test scores and distribution of academic achievement: Evidence from California schools 2002–2008. Available at econweb. umd. edu/~ ham/Pollution_all_accept_feb% 202014a. pdf. Accessed December. 2014;18:2016.
- Miller, S. J., & Vela, M. A. (2013). The effects of air pollution on educational outcomes: Evidence from Chile. Inter-American Development Bank. IDB Working Paper Series No. IDB-WP-468.
- ³⁰ Currie J, Hanushek EA, Kahn EM, Neidell M, Rivkin SG. Does pollution increase school absences?. *The Review of Economics and Statistics*. 2009 Nov 1;91(4):682-94.
- Gilliland FD, Berhane K, Rappaport EB, Thomas DC, Avol E, Gauderman WJ, London SJ, Margolis HG, McConnell R, Islam KT, Peters JM. The effects of ambient air pollution on school absenteeism due to respiratory illnesses. *Epidemiology*. 2001 Jan 1:43-54.
- Mohai P, Kweon BS, Lee S, Ard K. Air pollution around schools is linked to poorer student health and academic performance. *Health Affairs*. 2011 May 1;30(5):852-62.
- ³¹ Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.
- Martino D, Prescott S. Epigenetics and prenatal influences on asthma and allergic airways disease. *Chest*. 2011; 139:640–647.
- Pinkerton KE, Joad JP. Influence of air pollution on respiratory health during perinatal development. *Clin Exp Pharmacol Physiol*. 2006; 33:269–272.
- Gauderman WJ, Urman R, Avol E, et al. Association of improved air quality with lung development in children. *N Engl J Med*. 2015; 372:905–913.
- ³² Korten I, Ramsey K, Latzin P. Air pollution during pregnancy and lung development in the child. *Paediatric respiratory reviews*. 2017 Jan 1;21:38-46.

Gauderman WJ, Urman R, Avol E, et al. Association of improved air quality with lung development in children. *N Engl J Med*. 2015; 372:905–913.

³³ Carosino CM, Bein KJ, Plummer LE, et al. Allergic airway inflammation is differentially exacerbated by daytime and nighttime ultrafine and submicron fine ambient particles: heme oxygenase-1 as an indicator of PM-mediated allergic inflammation. *J Toxicol Environ Health A*. 2015; 78:254–266.

Wiegman CH, Li F, Clarke CJ, et al. A comprehensive analysis of oxidative stress in the ozone-induced lung inflammation mouse model. *Clin Sci (Lond)*. 2014; 126:425–440.

Li R, Kou X, Tian J, et al. Effect of sulfur dioxide on inflammatory and immune regulation in asthmatic rats. *Chemosphere*. 2014; 112:296–304.

³⁴ Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.

Samoli E, Nastos PT, Paliatou AG, Katsouyanni K, Priftis KN. Acute effects of air pollution on pediatric asthma exacerbation: evidence of association and effect modification. *Environmental research*. 2011 Apr 1;111(3):418-24.

Shin SW, Bae DJ, Park CS, Lee JU, Kim RH, Kim SR, Chang HS, Park JS. Effects of air pollution on moderate and severe asthma exacerbations. *Journal of Asthma*. 2019 May 23:1-1.

³⁵ Schikowski T, Mills IC, Anderson HR, et al. Ambient air pollution: a cause of COPD? *Eur Respir J*. 2014; 43:250–263.

Tsai SS, Chang CC, Yang CY. Fine particulate air pollution and hospital admissions for chronic obstructive pulmonary disease: a case-crossover study in Taipei. *International journal of environmental research and public health*. 2013; 10:6015–6026.

³⁶ Anderson DS, Patchin ES, Silva RM, et al. Influence of Particle Size on Persistence and Clearance of Aerosolized Silver Nanoparticles in the Rat Lung. *Toxicological Sciences*. 2015; 144:366–381.

³⁷ Yu XJ, Yang MJ, Zhou B, et al. Characterization of Somatic Mutations in Air Pollution-Related Lung Cancer. *EBioMedicine*. 2015; 2:583–590. Loomis D, Huang W, Chen G. The International Agency for Research on Cancer (IARC) evaluation of the carcinogenicity of outdoor air pollution: focus on China. *Chin J Cancer*. 2014; 33:189–196. Raaschou-Nielsen O, Andersen ZJ, Beelen R, et al. Air pollution and lung cancer incidence in 17 European cohorts: prospective analyses from the European Study of Cohorts for Air Pollution Effects (ESCAPE). *Lancet Oncol*. 2013; 14:813–822.

Chen G, Wan X, Yang G, Zou X. Traffic-related air pollution and lung cancer: A meta-analysis. *Thorac Cancer*. 2015; 6:307–318. [PubMed: 26273377]

Villeneuve PJ, Jerrett M, Brenner D, et al. A case-control study of long-term exposure to ambient volatile organic compounds and lung cancer in Toronto, Ontario, Canada. *Am J Epidemiol*. 2014; 179:443–451.

Cesaroni G, Badaloni C, Gariazzo C, et al. Long-term exposure to urban air pollution and mortality in a cohort of more than a million adults in Rome. *Environ Health Perspect*. 2013; 121:324–331.

Jerrett M, Burnett RT, Beckerman BS, et al. Spatial analysis of air pollution and mortality in California. *Am J Respir Crit Care Med*. 2013; 188:593–599.

Hart JE, Spiegelman D, Beelen R, et al. Long-Term Ambient Residential Traffic-Related Exposures and Measurement Error-Adjusted Risk of Incident Lung Cancer in the Netherlands Cohort Study on Diet and Cancer. *Environ Health Perspect*. 2015; 123:860–866.

Puett RC, Hart JE, Yanosky JD, et al. Particulate matter air pollution exposure, distance to road, and incident lung cancer in the nurses' health study cohort. *Environ Health Perspect*. 2014; 122:926–932.

Hamra GB, Guha N, Cohen A, et al. Outdoor particulate matter exposure and lung cancer: a systematic review and meta-analysis. *Environ Health Perspect*. 2014; 122:906–911.

Hystad P, Demers PA, Johnson KC, et al. Long-term residential exposure to air pollution and lung cancer risk. *Epidemiology*. 2013; 24:762–772.

Tsoi CT, Tse LA. Professional drivers and lung cancer: a systematic review

³⁸ HEI Collaborative Working Group on Air Pollution P; Health in Ho Chi Minh C. Le TG, et al. Effects of short-term exposure to air pollution on hospital admissions of young children for acute lower respiratory infections in Ho Chi Minh City, Vietnam. *Res Rep Health Eff Inst*. 2012:5–72. discussion 73-83.

Darrow LA, Klein M, Flanders WD, et al. Air pollution and acute respiratory infections among children 0-4 years of age: an 18-year time-series study. *Am J Epidemiol*. 2014; 180:968–977.

Kurt OK, Zhang J, Pinkerton KE. Pulmonary health effects of air pollution. *Current opinion in pulmonary medicine*. 2016 Mar;22(2):138.

³⁹ To T, Zhu J, Stieb D, Gray N, Fong I, Pinault L, Jerrett M, Robichaud A, Ménard R, van Donkelaar A, Martin RV. Early life exposure to air pollution and incidence of childhood asthma, allergic rhinitis and eczema. *European Respiratory Journal*. 2020 Feb 1;55(2).

⁴⁰ Estrella B, Naumova EN, Cepeda M, Voortman T, Katsikis PD, Drexhage HA. Effects of Air Pollution on Lung Innate Lymphoid Cells: Review of In Vitro and In Vivo Experimental Studies. *International journal of environmental research and public health*. 2019 Jan;16(13):2347.

⁴¹ Jerrett M, McConnell R, Wolch J, Chang R, Lam C, Dunton G, Gilliland F, Lurmann F, Islam T, Berhane K. Traffic-related air pollution and obesity formation in children: a longitudinal, multilevel analysis. *Environmental Health*. 2014 Dec 1;13(1):49.

McConnell R, Shen E, Gilliland FD, Jerrett M, Wolch J, Chang CC, Lurmann F, Berhane K. A longitudinal cohort study of body mass index and childhood exposure to secondhand tobacco smoke and air pollution: the Southern California Children's Health Study. *Environmental health perspectives*. 2015 Apr;123(4):360-6. Longitudinal associations of in utero and early life near-roadway air pollution with trajectories of childhood body mass index. Rundle A, Hoepner L, Hassoun A, Oberfield S, Freyer G, Holmes D, Reyes M, Quinn J, Camann D, Perera F, Whyatt R. Association of childhood obesity with maternal exposure to ambient air polycyclic aromatic hydrocarbons during pregnancy. *American journal of epidemiology*. 2012 Jun 1;175(11):1163-72.

⁴² Alderete TL, Habre R, Toledo-Corral CM, Berhane K, Chen Z, Lurmann FW, Weigensberg MJ, Goran MI, Gilliland FD. Longitudinal associations between ambient air pollution with insulin sensitivity, β -cell function, and adiposity in Los Angeles Latino children. *Diabetes*. 2017 Jul 1;66(7):1789-96.

Brook, R.D., Rajagopalan, S., Pope 3rd, C.A., et al., 2010. Particulate matter air pollution and cardiovascular disease: an update to the scientific statement from the American Heart Association. *Circulation* 121 (21), 2331–2378.

Qin XD, Qian Z, Vaughn MG, Trevathan E, Emo B, Paul G, Ren WH, Hao YT, Dong GH. Gender-specific differences of interaction between obesity and air pollution on stroke and cardiovascular diseases in Chinese adults from a high pollution range area: a large population based cross sectional study. *Science of the Total Environment*. 2015 Oct 1;529:243-8.

Brook RD, Sun Z, Brook JR, Zhao X, Ruan Y, Yan J, Mukherjee B, Rao X, Duan F, Sun L, Liang R. Extreme air pollution conditions adversely affect blood pressure and insulin resistance: the air pollution and cardiometabolic disease study. *Hypertension*. 2016 Jan;67(1):77-85.

Li J, Zhou C, Xu H, Brook RD, Liu S, Yi T, Wang Y, Feng B, Zhao M, Wang X, Zhao Q. Ambient air pollution is associated with HDL (high-density lipoprotein) dysfunction in healthy adults. *Arteriosclerosis, thrombosis, and vascular biology*. 2019 Mar;39(3):513-22.

⁴³ Nikolić M, Nikić D, Stanković A. Effects of air pollution on red blood cells in children. *Pol J Environ Stud*. 2008 Mar 1;17(28):267.

⁴⁴ Lu JG. Air pollution: a systematic review of its psychological, economic, and social effects. *Current opinion in psychology*. 2020 Apr 1;32:52-65.

⁴⁵ Graff Zivin J, Neidell M. The impact of pollution on worker productivity. *American Economic Review*. 2012 Dec;102(7):3652-73.

Chang T, Graff Zivin J, Gross T, Neidell M. Particulate pollution and the productivity of pear packers. *American Economic Journal: Economic Policy*. 2016 Aug;8(3):141-69.

Chang TY, Graff Zivin J, Gross T, Neidell M. The effect of pollution on worker productivity: evidence from call center workers in China. *American Economic Journal: Applied Economics*. 2019 Jan;11(1):151-72.

Hanna R, Oliva P. The effect of pollution on labor supply: Evidence from a natural experiment in Mexico City. *Journal of Public Economics*. 2015 Feb 1;122:68-79.

Bosi S, Desmarchelier D, Ragot L. Pollution effects on labor supply and growth. *International Journal of Economic Theory*. 2015 Dec;11(4):371-88.

Holub F, Hospido L, Wagner UJ. Air pollution and labor supply: Evidence from social security data.

⁴⁶ Graff Zivin J, Neidell M. The impact of pollution on worker productivity. *American Economic Review*. 2012 Dec;102(7):3652-73.

- ⁴⁷ Chang TY, Graff Zivin J, Gross T, Neidell M. The effect of pollution on worker productivity: evidence from call center workers in China. *American Economic Journal: Applied Economics*. 2019 Jan;11(1):151-72.
- ⁴⁸ Gauderman WJ. Air pollution and children--an unhealthy mix. *New England Journal of Medicine*. 2006 Jul 6;355(1):78-.
- ⁴⁹ Collins, T.J., Crews, D., DeFur, P.L., Dickerson, S.M., Edwards, T.M., Gore, A.C., Guillette, L.J., Hayes, T., Heindel, J.J., Moores, A., Patisaul, H.B., Tal, T.L., Thayer, K.A., Vandenberg, L.N., Warner, J.C., Watson, C.S., vom Saal, F.S., Zoeller, R.T., O'Brien, K.P., Myers, J.P., Schug, T.T., Abagyan, R., Blumberg, B., 2013. Designing endocrine disruption out of the next generation of chemicals. *Green Chem.* 15, 181–198. <https://doi.org/10.1039/c2gc35055f>.
- Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Souza Dias, B.F., Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G.M., Marten, R., Myers, S.S., Nishtar, S., Osofsky, S.A., Pattanayak, S.K., Pongsiri, M.J., Romanelli, C., Soucat, A., Vega, J., Yach, D., 2015 Nov 14. Safeguarding human health in the Anthropocene epoch: report of the Rockefeller Foundation-Lancet Commission on planetary health. *Lancet* 386 (10007), 1973–2028. [https://doi.org/10.1016/S0140-6736\(15\)60901-1](https://doi.org/10.1016/S0140-6736(15)60901-1) (Epub 2015 Jul 15).
- McMichael, A.J., 2017. *Climate Change and the Health of Nations: Famines, Fevers, and the Fate of Populations*. Oxford University Press, London.
- World Economic Forum, January, 2014. *Towards the Circular Economy: accelerating the scale-up across global supply chains*. http://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf.
- ⁵⁰ Landrigan PJ, Fuller R, Fisher S, Suk WA, Sly P, Chiles TC, Bose-O'Reilly S. Pollution and children's health. *Science of The Total Environment*. 2019 Feb 10;650:2389-94.
- Matos EP, Reisen VA, Serpa FS, Prezotti Filho PR, Leite MD. Space-time analysis of the effect of air pollution on children's health. *Cadernos de saude publica*. 2019 Oct 7;35:e00145418.
- ⁵¹ Small Business is Good for Local Economies; Big Business is Not, Researchers Say, *Business News Daily*, 2020 Feb 26; <https://www.businessnewsdaily.com/1298-small-business-good-for-economy.html>
- ⁵² Lego B, Deskins J, *The Eastern Panhandle Economic Outlook 2020-2024*, Bureau of Business & Economic Research, West Virginia University, John Chambers College of Business & Economics, 2019.
- ⁵³ Irvine W, Anderson AR. Small tourist firms in rural areas: agility, vulnerability and survival in the face of crisis. *International journal of entrepreneurial behavior & research*. 2004 Aug 1.
- ⁵⁴ Small AW, Downey EA. Orchestrating multiple changes: a framework for managing concurrent changes of varied type and scope. *IniEMC 96 Proceedings. International Conference on Engineering and Technology Management. Managing Virtual Enterprises: A Convergence of Communications, Computing, and Energy Technologies 1996 Aug 18 (pp. 627-634)*. IEEE.
- ⁵⁵ Verstraete C. Planning for the unexpected [business agility]. *Manufacturing Engineer*. 2004 Jun 1;83(3):18-21.
- ⁵⁶ Goodhue DL, Chen DQ, Boudreau MC, Cochran J. Addressing business agility challenges with enterprise systems. 2009.
- ⁵⁷ *West Virginia travel impacts 200-2018p*, prepared by Dean Runyan Associates, prepared for the West Virginia Tourism Office Charleston, West Virginia. 2019

- ⁵⁸ Taylor JG, Czarnowski KJ, Sexton NR, Flick S. The importance of water to Rocky Mountain National Park visitors: an adaptation of visitor-employed photography to natural resources management. *Journal of Applied Recreation Research*. 1995;20(1):61-85.
- ⁵⁹ Kaplan R, Kaplan S, Ryan R. *With people in mind: Design and management of everyday nature*. Island press; 1998.
- ⁶⁰ Dorwart CE, Moore RL, Leung YF. Visitors' perceptions of a trail environment and effects on experiences: A model for nature-based recreation experiences. *Leisure Sciences*. 2009 Dec 23;32(1):33-54.
- ⁶¹ Mace BL, Bell PA, Loomis RJ. Visibility and natural quiet in national parks and wilderness areas: Psychological considerations. *Environment and Behavior*. 2004 Jan;36(1):5-31.
- ⁶² Evans GW, Jacobs SV. Air pollution and human behavior. *Journal of Social Issues*. 1981 Jan;37(1):95-125.
- ⁶³ Chameides WL, Yu H, Liu SC, Bergin M, Zhou X, Mearns L, Wang G, Kiang CS, Saylor RD, Luo C, Huang Y. Case study of the effects of atmospheric aerosols and regional haze on agriculture: an opportunity to enhance crop yields in China through emission controls?. *Proceedings of the National Academy of Sciences*. 1999 Nov 23;96(24):13626-33.
- ⁶⁴ Velarde MD, Fry G, Tveit M. Health effects of viewing landscapes—Landscape types in environmental psychology. *Urban Forestry & Urban Greening*. 2007 Nov 15;6(4):199-212.
- ⁶⁵ Doyle M, Dorling S. Visibility trends in the UK 1950–1997. *Atmospheric Environment*. 2002 Jul 1;36(19):3161-72.
- ⁶⁶ Cucculelli M, Goffi G. Does sustainability enhance tourism destination competitiveness? Evidence from Italian Destinations of Excellence. *Journal of Cleaner Production*. 2016 Jan 16;111:370-82.
- ⁶⁷ Wilson S, Fesenmaier DR, Fesenmaier J, Van Es JC. Factors for success in rural tourism development. *Journal of Travel research*. 2001 Nov;40(2):132-8.
- ⁶⁸ Ivester KM, Couëtill LL, Moore GE. An observational study of environmental exposures, airway cytology, and performance in racing thoroughbreds. *Journal of veterinary internal medicine*. 2018 Sep;32(5):1754-62.

⁶⁹ Couëtil LL, Cardwell JM, Gerber V, Lavoie JP, Léguillette R, Richard EA. Inflammatory airway disease of horses—revised consensus statement. *Journal of veterinary internal medicine*. 2016 Mar;30(2):503-15.;

⁷⁰ https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/037-00108_IPR_R14-0037.pdf;

⁷¹ https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/037-00108_IPR_R14-0037.pdf;

Richard EA, Fortier GD, Pitel PH, Dupuis MC, Valette JP, Art T, Denoix JM, Lekeux PM, Van Erck E. Sub-clinical diseases affecting performance in Standardbred trotters: diagnostic methods and predictive parameters. *The Veterinary Journal*. 2010 Jun 1;184(3):282-9.;

Holcombe SJ, Robinson NE, Derksen FJ, Bertold B, Genovese R, Miller R, Rupp HD, Carr EA, Eberhart SW, Boruta D, Kaneene JB. Effect of tracheal mucus and tracheal cytology on racing performance in Thoroughbred racehorses. *Equine veterinary journal*. 2006 Jul 1;38(4):300-4.;

Sanchez A, Couetil LL, Ward MP, Clark SP. Effect of airway disease on blood gas exchange in racehorses. *Journal of veterinary internal medicine*. 2005 Jan;19(1):87-92.;

Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

⁷² Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

⁷³ Anderson JO, Thundiyil JG, Stolbach A. Clearing the air: a review of the effects of particulate matter air pollution on human health. *Journal of Medical Toxicology*. 2012 Jun 1;8(2):166-75.

Hernandez J, Hawkins DL, Scollay MC. Race-start characteristics and risk of catastrophic musculoskeletal injury in Thoroughbred racehorses. *Journal of the American Veterinary Medical Association*. 2001 Jan 1;218(1):83-6.;

Auer JA, Stick JA. *Equine Surgery* 4th edn, Saunders, 2012.;

Hernandez J, Hawkins DL, Scollay MC. Race-start characteristics and risk of catastrophic musculoskeletal injury in Thoroughbred racehorses. *Journal of the American Veterinary Medical Association*. 2001 Jan 1;218(1):83-6.;

Auer JA, Stick JA. *Equine Surgery* 4th edn, Saunders, 2012.;

⁷⁴ Witt T, Meinert T. *The Economic Impact of the Charles Town Thoroughbred Horse Racing Industry on the Jefferson County a*. 2011

⁷⁵ Masi B. *The 25% shift: The benefits of food localization for Northeast Ohio and how to realize them*. Cleveland-Cuyahoga County Food Policy Coalition; 2010.

⁷⁶ A Shared Agenda For Growing West Virginia's Agricultural Economy, Prepared by Fourth Economy for West Virginia Department Of Agriculture West Virginia University Extension Service 2012.

⁷⁷ Fuhrer J. Ozone risk for crops and pastures in present and future climates. *Naturwissenschaften*. 2009 Feb 1;96(2):173-94.

Ainsworth EA, Yendrek CR, Sitch S, Collins WJ, Emberson LD. The effects of tropospheric ozone on net primary productivity and implications for climate change. *Annual review of plant biology*. 2012 Jun 2;63:637-61.

Tariq M, Ali M, Shah ZJ. Characteristics of industrial effluents and their possible impacts on quality of underground water. *Soil Environ*. 2006 Jan 1;25(1):64-9.

Chauhan A, Joshi PC. Effect of ambient air pollutants on wheat and mustard crops growing in the vicinity of urban and industrial areas. *New York Science Journal*. 2010;3(2):52-60.

⁷⁸ Kozar MD, Hobba WA, Macy JA, Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area, US GEOLOGICAL SURVEY, 1991



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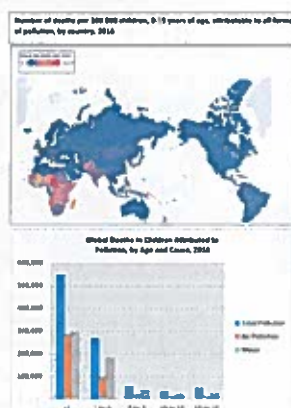
Pollution and children's health

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HIGHLIGHTS

- Pollution was responsible in 2016 for 940,000 deaths in children, two-thirds under age 5.
- 92% of pollution-related deaths in children occur in low- and middle-income countries.
- Most are due to respiratory and gastrointestinal diseases caused by polluted air and water.
- Pollution is linked also to multiple NCDs in children. These diseases are on the rise.
- Pollution prevention is a major opportunity to prevent disease and improve children's health.

GRAPHICAL ABSTRACT



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E-mail address: phil.landrigan@bc.edu (P.J. Landrigan).[†] were co-chairs of the *Lancet* Commission on Pollution and Health and Drs. Suk, Sly and Chiles were members of the Commission.

ABSTRACT

Findings: The *Lancet* Commission on Pollution and Health found that pollution – air, water, soil, and chemical pollution – was responsible in 2016 for 940,000 deaths in children worldwide, two-thirds of them in children under the age of 5. Pollution is inequitably distributed, and the overwhelming majority of pollution-related deaths in children occurred in low- and middle-income countries (LMICs). Most were due to respiratory and gastrointestinal diseases caused by polluted air and water.

Pollution is linked also to multiple non-communicable diseases (NCDs) in children including low birth weight, asthma, cancer and neurodevelopmental disorders, and these diseases are on the rise. The full impact of pollution, especially chemical pollution on the global burden of pediatric disease is not yet known, but almost certainly is undercounted because patterns of chemical exposure are not well charted and the potential toxicity of many chemical pollutants has not been characterized. The list of pediatric NCDs attributed to pollution will likely expand as the health effects of newer chemical pollutants are better defined and additional associations between pollution and disease are discovered.

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Conclusion: Pollution prevention presents a major, largely unexploited opportunity to improve children's health and prevent NCDs, especially in LMICs. Failure to incorporate pollution prevention into NCD control programs is a major missed opportunity for disease prevention.

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1. Introduction

Pollution is the world's largest environmental cause of disease and premature death. It is responsible for an estimated 9 million deaths per year—16% of all deaths worldwide—three times more deaths than AIDS, tuberculosis, and malaria combined (Landrigan et al., 2017). In the most severely affected countries, pollution is responsible for more than one death in four. Children are exquisitely sensitive to pollution (Suk et al., 2016).

Despite the great magnitude of the problem, pollution has been neglected in the international development and global health agendas.

To end this neglect, raise awareness of pollution's impacts, and mobilize the resources, political leadership and civic will needed to control pollution and prevent pollution-related disease, the *Lancet* Commission on Pollution and Health was formed in 2015. This Commission undertook a comprehensive analysis of pollution and its effects on human health and the global economy and disseminated its findings in October 2017 (Landrigan et al., 2017). This review is based on the *Lancet* Commission report and highlights pollution's impacts on the health of children.

2. Findings of the Lancet Commission on Pollution and Health

2.1. The global burden of pollution-related disease

Using data from the Global Burden of Disease study (Forouzanfar et al., 2015a and 2015b), the *Lancet* Commission found that air pollution is the largest cause of pollution-related disease. Air pollution is responsible for an estimated 6.4 million deaths per year - 4.2 million from ambient air pollution (HEI/IHME, n.d.) and 2.8 million from household air pollution (Smith et al., 2014; Yadama, 2013). Water pollution is responsible for an estimated 1.8 million deaths annually. Occupational pollutants – dusts and carcinogens kill an estimated 800,000 people. Lead is responsible for approximately 500,000 deaths each year and additionally causes widespread, but inadequately quantified impairment of cognitive function and behavior.

The *Lancet* Commission found that in many places and especially in the growing cities of rapidly developing low- and middle-income countries, pollution – especially, ambient air pollution and chemical pollution – is getting worse. The numbers of deaths due to pollution-related disease are projected to rise still further in coming decades unless aggressive interventions are undertaken (Lelieveld et al., 2015). Key drivers of these increases are the uncontrolled growth of cities; rising demands for energy; mining; smelting; deforestation; the global spread of toxic chemicals; increasingly heavy applications of toxic insecticides and herbicides; and the growing global use of petroleum-powered cars, trucks, and buses.

2.2. Pollution and non-communicable disease

The *Lancet* Commission noted that pollution is a major cause of non-communicable diseases (NCDs) in persons of all ages - responsible for 16% of all NCD deaths globally. The impact of pollution on NCD mortality is especially strong in heavily polluted low- and middle-income countries where it exceeds the impacts of tobacco, alcohol and obesity (Landrigan et al., 2017; Fuller et al., 2018). In 2015, all forms of pollution combined were responsible for 21% of all deaths from cardiovascular disease, 26% of deaths due to ischemic heart disease, 23% of deaths

due to stroke, 51% of deaths due to chronic obstructive pulmonary disease, and 43% of deaths due to lung cancer (Landrigan et al., 2017).

2.3. Toxic chemical pollution

The Commission considered chemical pollution to be a great and growing threat to children's health. An estimated 140,000 new chemicals and pesticides have been invented and manufactured since 1950, and many have become widely disseminated in the earth's environment (Landrigan and Goldman, 2011; Prüss-Ustün et al., 2011). Patterns of exposure to manufactured chemicals are poorly mapped in most countries, and the toxicity of the majority of chemicals in commerce has never been evaluated.

2.4. Pollution, poverty and human rights

The *Lancet* Commission found that pollution is deeply intertwined with poverty and injustice and stated that pollution threatens fundamental human rights - the right to life, the right to health, the right to well-being, and the rights of the child (United Nations, 1948). Ninety-two per cent of pollution-related deaths occur in low- and middle-income countries - environmental injustice on a global scale, and in countries at every income level, pollution and pollution-related disease are disproportionately concentrated in poor, minority and marginalized communities (Bullard, 1990).

Pollution is not only a consequence of poverty. It can also cause and deepen poverty by producing disease, dysfunction, premature death that results in diminished economic productivity, lost income and increased health-care costs for already impoverished families (Furie and Balbus, 2012). In children, early-life exposures to neurotoxic pollutants can permanently impair cognitive function thus contributing to school failure and reduced lifetime earnings.

Globalization is a powerful driver of the increasing concentration of polluting industries in low- and middle-income countries. Globalization has resulted in the relocation of industries such as chemical manufacture and steel-making from higher income countries to poorer countries where wages are often low, environmental and occupational regulations non-existent and not enforced, and the public health infrastructure weak. Seventy per cent of heavy chemical manufacture today occurs in low- and middle-income countries.

Globalization results also in the trans-shipment of hazardous materials from high-income countries where they are produced to low- and middle-income countries – another example of global environmental injustice. Such dumping includes the shipment of hazardous pesticides, industrial waste, electronic waste (e-waste), and toxic chemicals. Well publicized examples include the transport in 2006 of 500 tons of toxic chemical wastes from Amsterdam to Abidjan, Cote d'Ivoire aboard the vessel *Probo Koala*; the subsequent release of these chemicals resulted in 17 deaths and in >100,000 cases of illness (Margai and Barry, 2011). Another example is a large e-waste site at Agbogbloshie, Ghana where thousands of discarded computers, cell phones, kitchen appliances and other electronics have been shipped from European ports in containers misleadingly labelled "secondhand goods" (Caravanos et al., 2011).

2.5. Pollution is costly

The *Lancet* Commission undertook economic analyses and found that pollution is very costly. Pollution causes productivity losses by

removing economically active people from the workforce through disease and premature death. Pollution is also responsible for increases in health care spending. In rapidly developing, heavily polluted lower middle-income countries the health and productivity losses caused by pollution can amount to as much as 5% of gross domestic product. These great losses can undercut national trajectories of economic and social development (Landrigan et al., 2017). On the positive side of the equation, pollution control can yield substantial economic gains by reducing health care costs and boosting the economic productivity of healthier populations (Suk et al., 2018).

2.6. Pollution and climate change

Pollution is linked to global climate change (McMichael, 2017; Perera, 2017). Fuel combustion—fossil fuel combustion in high-income and middle-income countries, and biomass burning in low-income countries—accounts for 85% of airborne particulate pollution and for almost all pollution by sulfur and nitrogen oxides (Scovronick et al., 2015). Fuel combustion is also the major source of the greenhouse gases and short-lived climate pollutants that are the main drivers of global climate change.

2.7. The root cause of pollution

The global growth of pollution can be directly attributed to the linear, take-make-use-dispose economic paradigm—termed by Pope Francis “the throwaway culture” (Francis, 2015) — a materialistic way of life in which natural resources and human capital are viewed as abundant and inexhaustible, and the consequences of their reckless exploitation are given little heed. This paradigm focuses single-mindedly on short-term economic gain as measured by growth in Gross Domestic Product (GDP). It is unethical and ultimately unsustainable (Raworth, 2017).

2.8. Children's vulnerability to pollution

Fetuses, infants and young children are exquisitely sensitive to environmental pollution, especially during windows of vulnerability in early development (Suk et al., 2016; Vrijheid et al., 2016). Pollution exposures in infancy and early childhood can result in lasting injury to cells and tissues that increases risk of disease in childhood and can also reverberate across the life span (Barker, 2004). A great danger of pollution exposure in early life can be that it can undermine efforts to enhance children's development through improved nutrition, early learning and better health care.

The diseases caused by traditional forms of environmental pollution (e.g., coliforms in water or air pollution from solid fuels) are predominantly diarrhea, pneumonia and other infectious diseases. Modern environmental threats, by contrast, are linked mainly to non-communicable diseases: asthma, neurodevelopmental disorders, birth defects, obesity, diabetes, cardiovascular disease, mental health problems, and pediatric cancer (WHO, 2018). Children in rapidly industrializing countries are simultaneously confronted by both ancient and modern environmental threats to health (Lalonde et al., 2015).

A 1993 report by the US National Academy of Sciences (NAS, 1993) explored the origins of children's sensitivity to environmental pollutants and identified four key differences between children and adults:

1. Children breathe more air, drink more water, and eat more food than adults each day on a per-kilogram body-weight basis and therefore have proportionately greater exposures to environmental pollutants.
2. Children's metabolic pathways are immature and therefore children are unable to rapidly detoxify and excrete many toxic pollutants.
3. Children's exquisitely delicate developmental processes are easily disrupted. There exist windows of vulnerability in early human development that have no counterpart in adult life. Exposure to even very low doses of toxic chemicals or other environmental hazards

during these sensitive periods can increase risk of disease in childhood and across the life span.

4. Children have more future years than adults to develop diseases of long latency that may be triggered by harmful exposures in early life.

2.9. Air pollution and children's health

Exposure to air pollution in early human development, especially exposure to fine particulate pollution can be extremely deleterious to children's health and development. Maternal exposure to particulate pollution during pregnancy can injure the developing fetal brain and diminish children's intelligence (Perera, 2017). Air pollution exposure in pregnancy also increases risk for prematurity and low birth weight—two further risk factors for developmental disabilities (Woodruff et al., 2007; Jacobs et al., 2017). Exposure to air pollution during infancy and early childhood causes lung damage, impairs lung growth, and can increase subsequent risk for asthma, pneumonia and chronic obstructive pulmonary disease (Gauderman et al., 2015; Korten et al., 2017).

2.10. Chemical pollution and children's health

Young children and pregnant women are exposed daily to manufactured chemicals in air, water, soil, consumer products and food (Landrigan and Goldman, 2011). Routine monitoring surveys detect several hundred chemical pollutants in the bodies of all persons (CDC, n.d.). Some widely used chemicals are known to be toxic to children's development. Hundreds more have never been tested for safety or toxicity and their possible dangers to children's health and development are not known (Landrigan and Goldman, 2011).

Toxic manufactured chemicals have been responsible for multiple episodes of disease and death in both children and adults. Historical examples include asbestos (multiple cancers) (Selikoff et al., 1968); tetraethyl lead (adult and pediatric lead poisoning) (Needleman et al., 1979); benzene (leukemia and lymphoma) (Rinsky et al., 2002); benzidine-based dyes (bladder cancer) (Rehn, 1895); the rubber chemical, 1, 3-butadiene (leukemia and lymphoma) (Landrigan, 1990); and the organophosphate pesticides (developmental neurotoxicity) (Rauh et al., 2011).

Newer synthetic chemicals that have entered markets in the past 2–3 decades threaten to repeat this unfortunate history. They include developmental neurotoxicants such as phthalates and brominated flame retardants (Engel et al., 2010; Herbstman and Mall, 2014; Grandjean and Landrigan, 2014); endocrine disruptors (Gore et al., 2015); the herbicide glyphosate, recently found by the International Agency for Research on Cancer (IARC) to be a probable human carcinogen (Guyton et al., 2015); the neonicotinoid insecticides (Cimino et al., 2016); pharmaceutical wastes (Kümmerer, 2009); and manufactured nanomaterials. Early warnings that new chemicals and other environmental hazards might pose hazards to children's health have frequently been ignored (Jarosinska and Gee, 2007). As a result, efforts to control exposures and to prevent disease have often been delayed, sometimes for decades. (Landrigan and Goldman, 2011).

Two fundamental problems that underlie these recurrent episodes of disease and death caused by manufactured chemicals are failure of the chemical manufacturing industries to take responsibility for the materials they produce coupled with absence in most countries of chemical safety policies requiring that new chemicals be tested for safety or toxicity before they are allowed to enter commercial markets (Landrigan and Goldman, 2011). Fewer than half of the most widely used chemicals have ever been tested for safety or toxicity, and fewer than 20% have been assessed for potential to disrupt early human development. Premarket evaluation of new chemicals has become mandatory in only the past decade and in only a few high-income countries.

In children, multiple non-communicable diseases (NCDs) have been linked to toxic chemical pollutants. Prospective birth cohort epidemiologic studies that measure environmental exposures during pregnancy

and in early postnatal life and then follow children longitudinally have contributed greatly to discovery of these associations. Examples include:

- Asthma is increased in children exposed to particulate air pollution (Friedman et al., 2001; Suh et al., 2000);
- Neurodevelopmental impairment with reduction of IQ, shortening of attention span and disruption of behavior is caused by early-life exposure to lead (Budtz-Jørgensen et al., 2013);
- Neurodevelopmental impairment with reduction of IQ is observed in children exposed to PCBs (Jacobson and Jacobson, 1996);
- Neurodevelopmental impairment with reduction of IQ and shortening of attention span is seen in children exposed to methyl mercury (Grandjean et al., 1997);
- Neurodevelopmental impairment with loss of IQ is seen in infants exposed prenatally to arsenic (Wasserman et al., 2007) and to manganese in chemically contaminated drinking water (Khan et al., 2011);
- Neurodevelopmental impairment with loss of IQ and behavioral disruption is associated with prenatal exposure to organophosphate pesticides (Rauh et al., 2011). Prenatal exposures to organophosphates are also linked to changes in brain structure and function in children (Rauh et al., 2012).
- Neurodevelopmental impairment with loss of IQ, behavioral disruption and increased risk of attention deficit/hyperactivity disorder (ADHD) is associated with prenatal exposures to phthalates (Engel et al., 2010; Engel et al., 2018).
- Neurodevelopmental impairment with persisting loss of IQ and disruption of behavior is associated with prenatal exposure to brominated flame retardants (Herbstman and Mall, 2014).
- Slow brain maturation and delayed cognitive development with exposure of school-aged children to traffic-related air pollution. (Pujol et al., 2016, Sunyer et al., 2015)

A major unanswered question is whether there are additional chemical pollutants in wide use today that have not yet been recognized to endanger the health of children. Fig. 1 illustrates this concept in relation to developmental neurotoxicants. Commenting on the hazards inherent in children's widespread exposure to untested chemicals, the late David

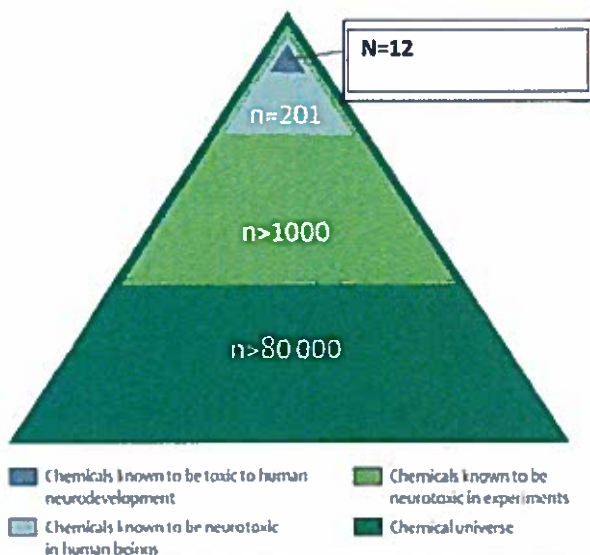


Fig. 1. The extent of knowledge of neurotoxic chemicals. Of the thousands of chemicals in commerce, only a small fraction have been proven to cause developmental neurotoxicity in children, but another 200 can cause neurotoxicity in adult workers and another 1000 are neurotoxic in experimental animals. Most of the chemicals in these two latter groups have never been tested for potential to cause developmental neurotoxicity (From Grandjean and Landrigan, 2006).

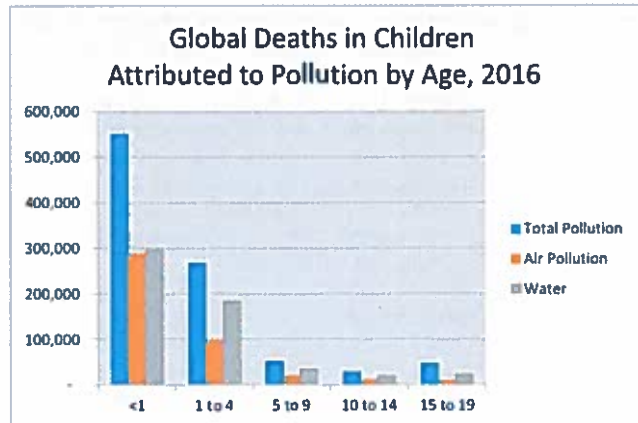


Fig. 2. Global deaths in children attributed to pollution by age, 2016.

Rall, PhD, MD, former director of the US National Institute of Environmental Health Sciences, observed that:

"If thalidomide had caused a ten-point loss of IQ instead of obvious birth defects of the limbs, it would probably still be on the market."
 [(Weiss, 1982)]

2.11. Pollution's contribution to the global burden of disease in children

The World Health Organization estimates that physical, chemical, and biological hazards in the environment are responsible for 26% of all deaths in children under the age of five years – nearly 1.5 million deaths worldwide (WHO, 2018). The WHO definition of environmental risks is broad and includes road accidents, ultraviolet and ionizing radiation, noise, electromagnetic fields, occupational psychosocial risks, built environments, agricultural methods, and man-made climate and ecosystem change as well as pollution.

The Lancet Commission on Pollution and Health found that pollution – defined specifically as air, water, soil, and toxic chemical pollution – was responsible in 2016 for 940,000 deaths in children, two-thirds of them in children under the age of 5 years (Landrigan et al., 2017) (Fig. 2). The overwhelming majority of these pollution-related deaths occurred in low- and middle-income countries. (Fig. 3 and Fig. 4) Most were due to respiratory and gastrointestinal diseases caused by polluted air and water. (Fig. 2 and Table 1).

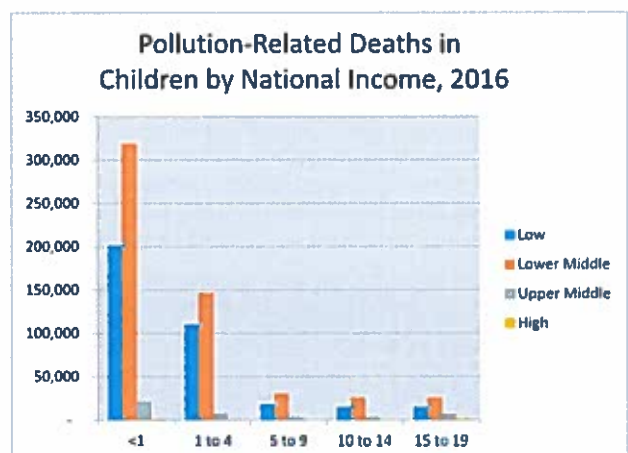


Fig. 3. Pollution-related deaths in children by national income, 2016.

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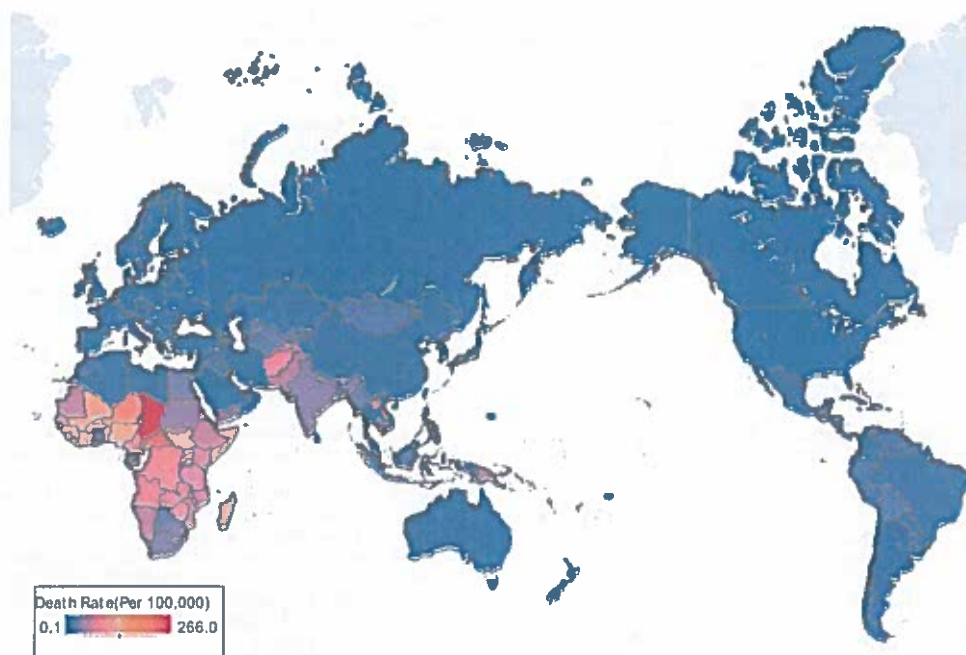


Fig. 4. Number of deaths per 100,000 children, 0–19 years of age, attributable to all forms of pollution, by country, 2016.

Pollution is linked additionally to multiple non-communicable diseases (NCDs) in children including low birth weight, asthma, cancer and neurodevelopmental disorders. Pollution exposures in early life also increase risk across the lifespan for a range of NCDs including chronic obstructive pulmonary disease, cardiovascular disease, stroke and cancer (Barker, 2004). The full impact of pollution and especially of toxic chemical pollution on the global burden of NCDs in children is not yet known and almost certainly is undercounted. A root cause of this lack of information is failure to assess the safety and characterize the potential toxicity of many chemicals to which children are extensively exposed. It is likely that the list of NCDs in children attributed to pollution will expand as the health effects of newer chemical pollutants are better defined and additional associations between pollution and disease are discovered.

3. Conclusion

A key message of the *Lancet* Commission on Pollution and Health is that with leadership, resources and clearly articulated, data-driven strategies, pollution can be controlled and pollution-related disease prevented (Landrigan et al., 2017). The experience of the many cities and countries that have developed, field-tested and successfully implemented pollution control policies provides strong support for this proposition. Implementation of pollution control strategies can provide multiple benefits, both short-term and long-term, for human health, the economy and the environment for societies at every level of income (Grosse et al., 2002; Samet et al., 2017).

Table 1
Global deaths in children attributable to pollution, 2016.

Age range	Total pollution	Air pollution	Water
<1	550,854	286,863	296,655
1 to 4	267,241	95,999	182,924
5 to 9	50,617	18,871	33,882
10 to 14	27,912	10,409	18,660
15 to 19	46,085	8788	21,389

Long-term control of pollution and prevention of pollution-related diseases in children will require that societies at every level of income prevent pollution at source by fundamentally changing societal patterns of production, consumption and transportation (Collins et al., 2013; Collins et al., 2013; Whitmee et al., 2015; McMichael, 2017). This transition will require movement away from the current, fundamentally unsustainable linear economic paradigm towards a new paradigm rooted in the concept of the circular economy and based on recognition of human rights, especially the right of children to health and well-being (Francis, 2015; World Economic Forum, 2014; HEAL, n.d.).

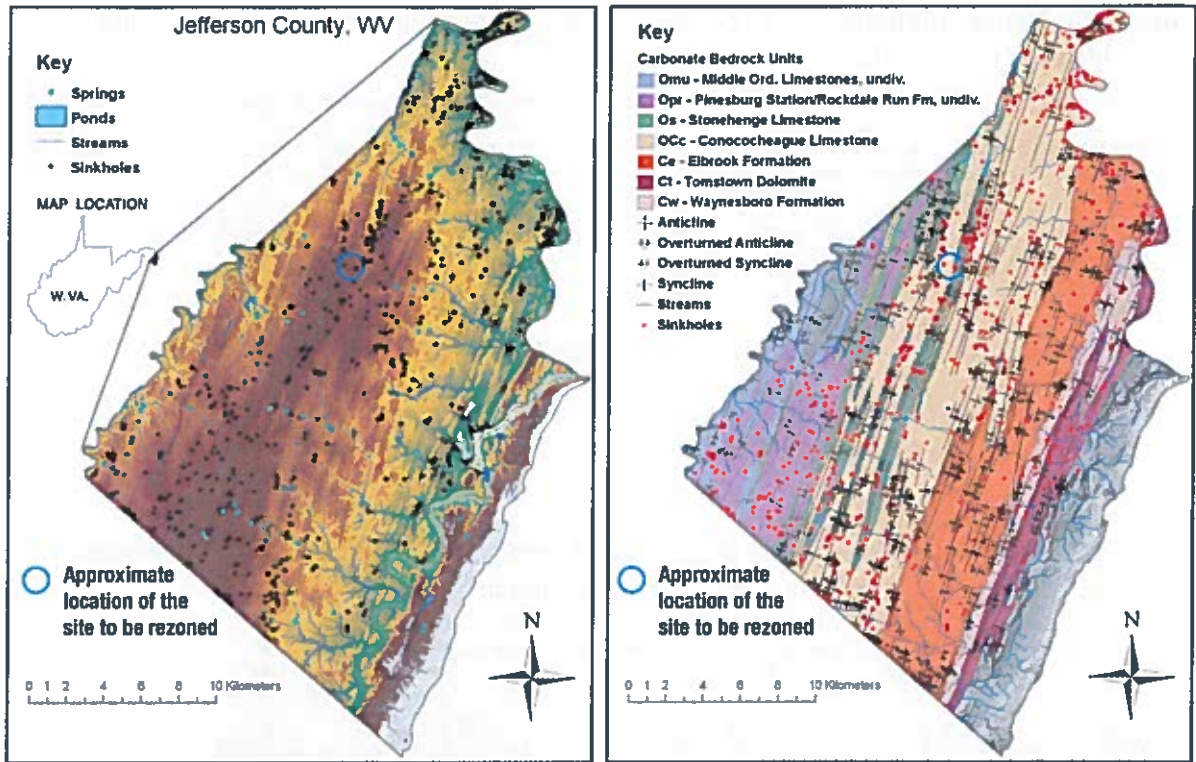
Pollution prevention presents a major, underexploited opportunity to improve child health, prevent NCDs in children, and advance social justice in all countries and especially in low- and middle-income countries. Failure to incorporate pollution prevention into NCD control programs is a major missed opportunity for disease prevention.

References

- Barker, D.J., 2004. The developmental origins of adult disease. *J. Am. Coll. Nutr.* 23 (588S–95S).
- Budtz-Jørgensen, E., Bellinger, D., Lanphear, B., Grandjean, P., International Pooled Lead Study Investigators, 2013 Mar. An international pooled analysis for obtaining a benchmark dose for environmental lead exposure in children. *Risk Anal.* 33 (3), 450–461.
- Bullard, R.D., 1990. *Boulder CO. Dumping in Dixie: Race, Class, and Environmental Quality.* Westview Press, Boulder, CO.
- Caravanos, J., Clark, E., Fuller, R., Lambertson, C., 2011. Assessing worker and environmental chemical exposure risks at an e-waste recycling and disposal site in Accra, Ghana. *J. Health Pollut.* 1, 16–25.
- Centers for Disease Control and Prevention (CDC), d. National biomonitoring program. Available at: <https://www.cdc.gov/biomonitoring/index.html>, Accessed date: 3 July 2018.
- Cimino, A.M., Boyles, A.L., Thayer, K.A., Perry, M.J., 2016. Effects of neonicotinoid pesticide exposure on human health: a systematic review. *Environ. Health Perspect.* 125. <https://doi.org/10.1289/EHP151>.
- Collins, T.J., Crews, D., DeFur, P.L., Dickerson, S.M., Edwards, T.M., Gore, A.C., Guillet, L.J., Hayes, T., Heindel, J.J., Moores, A., Patisaul, H.B., Tal, T.L., Thayer, K.A., Vandenberg, L.N., Warner, J.C., Watson, C.S., vom Saal, F.S., Zoeller, R.T., O'Brien, K.P., Myers, J.P., Schug, T.T., Abagyan, R., Blumberg, B., 2013. Designing endocrine disruption out of the next generation of chemicals. *Green Chem.* 15, 181–198. <https://doi.org/10.1039/c2gc35055f>.
- Engel, S.M., Miodovnik, A., Canfield, R.L., et al., 2010. Prenatal phthalate exposure is associated with childhood behavior and executive functioning. *Environ. Health Perspect.* 118, 565–571.

- Engel, S.M., Villanger, G.D., Nethery, R.C., et al., 2018 May 10. Prenatal phthalates, maternal thyroid function, and risk of attention-deficit hyperactivity disorder in the Norwegian mother and child cohort. *Environ. Health Perspect.* 126 (5), 057004. <https://doi.org/10.1289/EHP2358>.
- Forouzanfar, M., 2015a. Mortality and causes of death collaborators. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 388, 1459–1544. [https://doi.org/10.1016/S0140-6736\(16\)31012-1](https://doi.org/10.1016/S0140-6736(16)31012-1) (GBD).
- Forouzanfar, M., 2015b. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease 2016. *Lancet* 388, 1659–1724. [https://doi.org/10.1016/S0140-6736\(16\)31679-8](https://doi.org/10.1016/S0140-6736(16)31679-8) (GBD, Risk Factors Collaborators).
- Friedman, M.S., Powell, K.E., Hutwagner, L., Graham, L.M., Teague, W.G., 2001. Impact of changes in transportation and commuting behaviors during the 1996 summer Olympic games in Atlanta on air quality and childhood asthma. *JAMA* 285, 897–905.
- Fuller, R., Rahona, E., Fisher, S., Caravanos, J., Webb, D., Kass, D., Matte, T., Landrigan, P.J., 2018. Pollution and non communicable disease – time to end the neglect. *Lancet Planet Health*, 2 (3), e96–e98.
- Furie, G.L., Balbus, J., 2012. Global environmental health and sustainable development: the role at Rio+20. *Cien Saude Colet* 17, 1427–1432.
- Gauderman, W.J., Urman, R., Avol, E., et al., 2015. Association of improved air quality with lung development in children. *N. Engl. J. Med.* 372, 905–913.
- Gore, A.C., Chappell, V.A., Fenton, S.E., et al., 2015. EDC-2: the Endocrine Society's second scientific statement on endocrine-disrupting chemicals. *Endocr. Rev.* 36, E1–150.
- Grandjean, P., Landrigan, P.J., 2006. Developmental neurotoxicity of industrial chemicals: a silent pandemic. *Lancet* 368 (9553), 2167–2178.
- Grandjean, P., Landrigan, P.J., 2014. Neurobehavioural effects of developmental toxicity. *Lancet Neurol.* 13, 330–338.
- Grandjean, P., Weihe, P., White, R.F., Debes, F., Araki, S., Yokoyama, K., 1997. Cognitive deficit in 7-year old children with prenatal exposure to methylmercury. *Neurotoxicol. Teratol.* 19 (6), 417–428.
- Grosse, S.D., Matte, T.D., Schwartz, J., Jackson, R.J., 2002. Economic gains resulting from the reduction in children's exposure to lead in the United States. *Environ. Health Perspect.* 110, 563–569.
- Guyton, K.Z., Loomis, D., Grosse, Y., et al., 2015. Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon, and glyphosate. *Lancet Oncol.* 16, 490–491.
- Health and Environment Alliance (HEAL), d. Walking the circle – the 4 guiding pillars for a circular economy. http://env-health.org/IMG/pdf/walking_the_circle.pdf, Accessed date: 30 March 2017.
- Health Effects Institute (HEI) and Institute for Health Metrics and Evaluation (IHME), d. State of global air – 2018. Available at: <https://www.stateofglobalair.org>, Accessed date: 3 July 2018.
- Herbstman, J.B., Mall, J.K., 2014. Developmental exposure to polybrominated diphenyl ethers and neurodevelopment. *Curr. Environ. Health Rep.* 2 (1), 101–112.
- Jacobs, M., Zhang, C., Chen, S., Mullins, B., Bell, M., Jin, L., Guo, Y., Huxley, R., Pereira, G., 2017 Feb 1. The association between ambient air pollution and selected adverse pregnancy outcomes in China: a systematic review. *Sci. Total Environ.* 579, 1179–1192. <https://doi.org/10.1016/j.scitotenv.2016.11.100> Epub 2016 Nov 29. (PMID: 27913015).
- Jacobson, J.L., Jacobson, S.W., 1996. Intellectual impairment in children exposed to polychlorinated biphenyls in utero. *N. Engl. J. Med.* 335 (11), 783–789.
- Jarusinska, D., Gee, D., 2007 Oct. Children's environmental health and the precautionary principle. *Int. J. Hyg. Environ. Health* 210 (5), 541–546 Epub 2007 Sep 21. (PMID: 17889608).
- Khan, K., Factor-Litvak, P., Wasserman, G.A., Liu, X., Almed, E., Parvez, F., et al., 2011. Manganese exposure from drinking water and children's classroom behavior in Bangladesh. *Environ. Health Perspect.* 119, 1501–1506.
- Korten, I., Ramsey, K., Latzin, P., 2017 Jan. Air pollution during pregnancy and lung development in the child. *Paediatr. Respir. Rev.* 21, 38–46. <https://doi.org/10.1016/j.prrv.2016.08.008> Epub 2016 Aug 19. (PMID: 2766551).
- Klimmerer, K., 2009. Antibiotics in the aquatic environment – a review – part II. *Chemosphere* 75, 435–441.
- Laborde, A., Tomasina, F., Bianchi, F., Bruné, M.N., Buka, I., Comba, P., Corra, L., Cori, L., Duffert, C.M., Harari, R., Iavarone, I., McDiarmid, M.A., Gray, K.A., Sly, P.D., Soares, A., Suk, W.A., Landrigan, P.J., 2015 Mar. Children's health in Latin America: the influence of environmental exposures. *Environ. Health Perspect.* 123 (3), 201–209. <https://doi.org/10.1289/ehp.1408292>.
- Landrigan, P.J., 1990. Critical assessment of epidemiologic studies on the human carcinogenicity of 1,3-butadiene. *Environ. Health Perspect.* 86, 143–147.
- Landrigan, P.J., Goldman, L.R., 2011. Children's vulnerability to toxic chemicals: a challenge and opportunity to strengthen health and environmental policy. *Health Aff.* 30, 842–850. <https://doi.org/10.1377/hlthaff.2011.0151>.
- Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., N. Basu, et al., 2017. The Lancet Commission on pollution and health. *Lancet* [https://doi.org/10.1016/S0140-6736\(17\)32345-0](https://doi.org/10.1016/S0140-6736(17)32345-0).
- Leheveld, J., Evans, J.S., Fnaiss, M., Giannadaki, D., Pozzer, A., 2015. The contribution of outdoor air pollution sources to premature mortality on a global scale. *Nature* 525, 367–371. <https://doi.org/10.1038/nature15371>.
- Margai, F.M., Barry, F.B., 2011. Global geographies of environmental injustice and health: a case study of illegal hazardous waste dumping in Cote d'Ivoire. *Geospatial Anal. Environ. Health* 4, 257–281.
- McMichael, A.J., 2017. Climate Change and the Health of Nations: Famines, Fevers, and the Fate of Populations. Oxford University Press, London.
- National Academy of Sciences, 1993. Pesticides in the Diets of Infants and Children. National Academies Press, Washington, DC.
- Needleman, H.L., Gunnoe, C., Leviton, A., et al., 1979. Deficits in psychologic and classroom performance of children with elevated dentine lead levels. *N. Engl. J. Med.* 300 (13), 689–695.
- Perera, F.P., 2017. Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change. *Environ. Health Perspect.* 125, 141–148. <https://doi.org/10.1289/EHP299>.
- Prüss-Ustün, A., Vickers, C., Haefliger, P., Bertolini, R., 2011. Knowns and unknowns on burden of disease due to chemicals: a systematic review. *Environ. Health* 10, 9. <https://doi.org/10.1186/1476-069X-10-9>.
- Pujol, J., Martínez-Vilavella, G., Macia, D., et al., 2016. Traffic pollution exposure is associated with altered brain connectivity in school children. *NeuroImage* 129, 175–184.
- Rauh, V., Arunajadai, S., Horton, M., et al., 2011. 7-year neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. *Environ. Health Perspect.* 119, 1196–1201.
- Rauh, V.A., Perera, F.P., Horton, M.K., et al., 2012 May 15. Brain anomalies in children exposed prenatally to a common organophosphate pesticide. *Proc. Natl. Acad. Sci. U. S. A.* 109 (20), 7871–7876.
- Raworth, K., 2017. Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist. Chelsea Green Publishing, White River Junction, Vermont.
- Rehn, L., 1895. Blasengeschwülste bei Fuchsin-Arbeitern. *Verh Dtsch Gesellsch Chir* 24, 240–252.
- Rinsky, R.A., Hornung, R.W., Silver, S.R., Tseng, C.Y., 2002 Dec. Benzene exposure and hematopoietic mortality: a long-term epidemiologic risk assessment. *Am. J. Ind. Med.* 42 (6), 474–480 (PMID: 12439870).
- Samet, J.M., Burke, T.A., Goldstein, B.D., 2017. The trump administration and the environment – heed the science. *N. Engl. J. Med.* 376, 1182–1188.
- Scovronick, N., Dora, C., Fletcher, E., Haines, A., Shindell, D., 2015. Reduce short-lived climate pollutants for multiple benefits. *Lancet* 386, e28–e31. [https://doi.org/10.1016/S0140-6736\(15\)61043-1](https://doi.org/10.1016/S0140-6736(15)61043-1).
- Selikoff, I.J., Hammond, E.C., Churg, J., 1968. Asbestos exposure, smoking and neoplasia. *JAMA* 204, 106–112.
- Francis, 2015. Laudato Si: Encyclical Letter on Care for our Common Home. Vatican City Holy See.
- Smith, K.R., Bruce, N., Balakrishnan, K., Adair-Rohani, H., Balmes, J., Chafe, Z., Dherani, M., Hosgood, H.D., Mehta, S., Pope, D., Rehfuess, E., HAP CRA Risk Expert Group, 2014. Millions dead: how do we know and what does it mean? Methods used in the comparative risk assessment of household air pollution. *Annu. Rev. Public Health* 35, 185–206. <https://doi.org/10.1146/annurev-publichealth-032013-182356>.
- Suh, H.H., Bahadori, T., Vallarino, J., Spengler, J.D., 2000. Criteria air pollutants and toxic air pollutants. *Environ. Health Perspect.* 108 (Suppl. 4), 625–633.
- Suk, W.A., Ahanchian, H., Asante, K.A., et al., 2016. Environmental pollution: an underrecognized threat to children's health, especially in low- and middle-income countries. *Environ. Health Perspect.* 124 (3), A41–A45. <https://doi.org/10.1289/ehp.1510517>.
- Suk, W.A., Heacock, M.L., Trotter, B.A., Amolegbe, S.M., Avakian, M.D., Henry, H.F., Carlin, D.J., Reed, L.G., 2018. Assessing the economic and societal benefits of SRP-funded research. *Environ. Health Perspect.* <https://doi.org/10.1289/EHP3534> (in press).
- Sunyer, J., Esnaola, M., Alvarez-Pedrerol, M., et al., 2015. Association between traffic-related air pollution in schools and cognitive development in primary school children: a prospective cohort study. *PLoS Med.* 12 (e1001792).
- United Nations, Dec 10, 1948. Universal declaration of human rights. <http://www.un.org/en/universal-declaration-humanrights/>, Accessed date: 18 January 2017.
- Vrijheid, M., Casas, M., Gascon, M., Valvi, D., Nieuwenhuijsen, M., 2016 Jul. Environmental pollutants and child health: a review of recent concerns. *Int. J. Hyg. Environ. Health* 219 (4–5), 331–342. <https://doi.org/10.1016/j.ijheh.2016.05.001> Epub 2016 May 11. (PMID:27216159).
- Wasserman, G.A., Liu, X., Parvez, F., Ahsan, H., Factor-Litvak, P., Kline, J., et al., 2007. Water arsenic exposure and intellectual function in 6-year-old children in Araihazar, Bangladesh. *Environ. Health Perspect.* 115, 285–289.
- Weiss, B., 1982. Food additives and environmental chemicals as sources of childhood behavior disorders. *J. Am. Acad. Child Psychiatry* 21, 144–152.
- Whitmore, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Souza Dias, B.F., Ezech, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G.M., Marten, R., Myers, S.S., Nishtar, S., Osofsky, S.A., Pattanayak, S.K., Pongsiri, M.J., Romanelli, C., Soucat, A., Vega, J., Yach, D., 2015 Nov 14. Safeguarding human health in the Anthropocene epoch: report of the Rockefeller Foundation-Lancet Commission on planetary health. *Lancet* 386 (10007), 1973–2028. [https://doi.org/10.1016/S0140-6736\(15\)60901-1](https://doi.org/10.1016/S0140-6736(15)60901-1) (Epub 2015 Jul 15).
- Woodruff, T.J., Darrow, L.A., Parker, J.D., 2007. Air pollution and postneonatal infant mortality in the United States, 1999–2002. *Environ. Health Perspect.* 116, 110–115.
- World Economic Forum, January, 2014. Towards the Circular Economy: accelerating the scale-up across global supply chains. http://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf accessed March 13, 2017.
- World Health Organization (WHO), 2018. Inheriting a Sustainable World? Atlas on Children's Health and the Environment. WHO, Geneva Available at: <http://www.who.int/ceh/publications/inheriting-a-sustainable-world/en/>, Accessed date: 5 July 2018.
- Yadama, G.N., 2013. Fires, Fuel, and the Fate of 3 Billion: The State of the Energy Impoverished. Oxford University Press.

Figure 1:



Attachment: 20200623 - Written Comments - Packet #12 (1685 : Ordinance #2017-302)

Figure 2:

Cover-subsidence sinkholes tend to develop gradually where the covering sediments are permeable and contain sand.

Granular sediments spall into secondary openings in the underlying carbonate rocks.

A column of overlying sediments settles into the vacated spaces (a process termed "piping").

Dissolution and infilling continue, forming a noticeable depression in the land surface.

The slow downward erosion eventually forms small surface depressions 1 inch to several feet in depth and diameter.



In areas where cover material is thicker or sediments contain more clay, cover-subsidence sinkholes are relatively uncommon, are smaller, and may go undetected for long periods.

Cover-collapse sinkholes

may develop abruptly (over a period of hours) and cause catastrophic damages. They occur where the covering sediments contain a significant amount of clay.

Sediments spall into a cavity.

As spalling continues, the cohesive covering sediments form a structural arch.

The cavity migrates upward by progressive roof collapse.

The cavity eventually breaches the ground surface, creating sudden and dramatic sinkholes.



Figure 5:

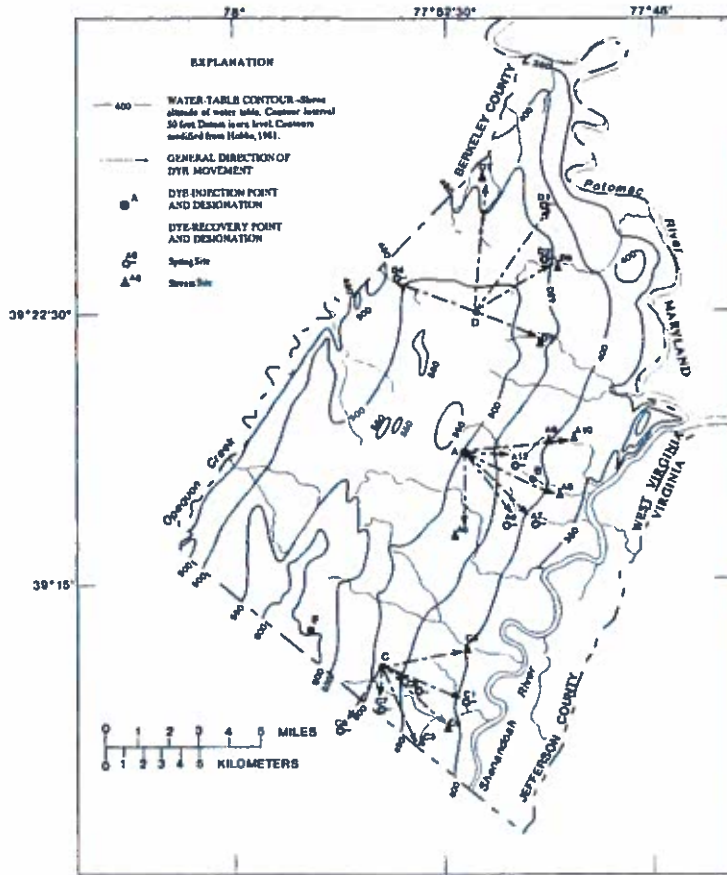
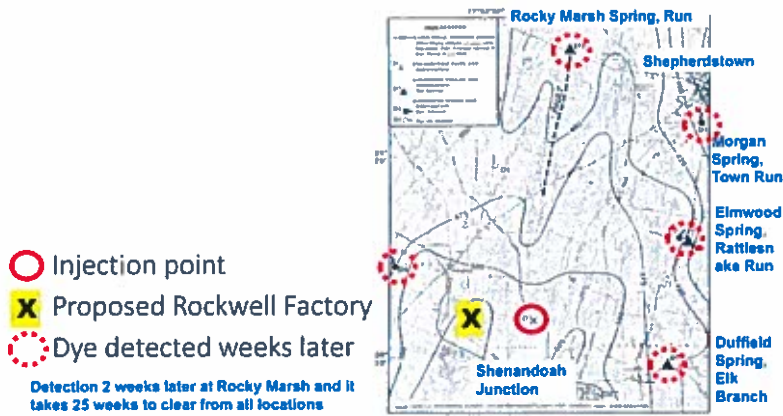


Figure 6:



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Figure 7:

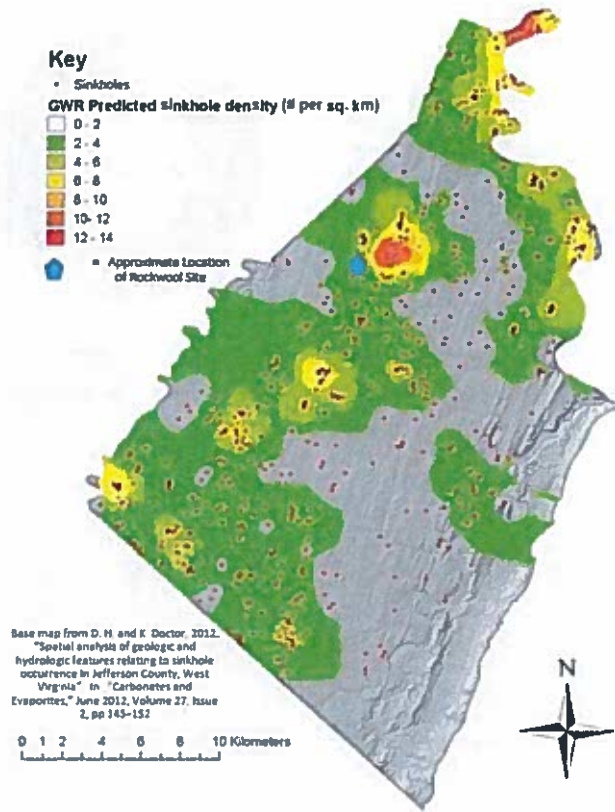
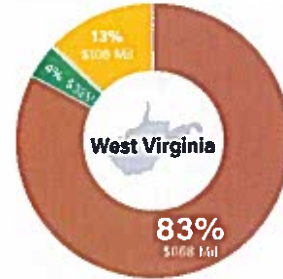


Figure 8:

Jefferson County was in the top 9 counties for animal and animal product sales in West Virginia (total state sales: \$668 million), the second highest producing county for field crops with more than \$10 million in sales (total state sales: \$106 million), and the third highest county for vegetables and fruit sales with over 1.9 million in sales (total state sales: \$32 million).

Source: Modified from West Virginia Department of Agriculture Full Report from 2012: A Shared Agenda for Growing West Virginia's Agriculture Economy



Animals & Animal Products



Field Crops



Fruits & Vegetables



Jefferson County Foundation, Inc.

November 4, 2019

Director, Division of Water and Waste Management, WVDEP
 ATTENTION: Sharon Mullins, Permitting Section
 601 57th Street SE
 Charleston, WV 25304-2345
 Sharon.A.Mullins@WV.Gov

RE: Public Hearing/Notice No. SM-108-2019. Application Nos. WVR108876 reissue #2 and WVG611896.

Dear Director:

The Department of Environmental Protection should deny Rockwool requested permits because it is unable to operate its proposed business in a manner that protects the water resources of Jefferson County. For the reasons stated below, Rockwool has not demonstrated the competence or capability to comply with the various controlling regulations established to protect the water resources of the County, and thus the surrounding waterways. The failure of Rockwool to demonstrate the technical competence necessary to build and operate its facility is reason alone to deny the permits; or, in the alternative to modify the permits in a manner that requires Rockwool to take mitigating action to prevent groundwater and surface water contamination far beyond what it is doing now.

The issues identified below, as well as other information that has been provided to the DEP, raise serious issues not currently addressed by any DEP evaluation. The law requires that DEP consider and respond to all comments in a substantive manner, and we expect the DEP response to comprehensively address the issues raised below. Please note and take into consideration that a great majority of the people and agricultural businesses in Jefferson county depend on groundwater and cannot feasibly, for financial, logistical, and geographical reasons, switch to using treated water.

Finally, as discussed below, we believe that the DEP should hold an "evidentiary" hearing in Jefferson County in which the public is able to present the technical, expert, evidence about the existential threat posed to the water sources in Jefferson County. We have the evidence necessary to demonstrate that allowing Rockwool to operate here presents a risk that the DEP should not allow, and will create liabilities that West Virginia cannot bear. We believe that an evidentiary proceeding would be the most efficient and effective manner for the DEP to

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determine whether Rockwool is able to operate its facilities in compliance with the controlling state and federal environmental regulations.

Comments on Permit Registration No. WVG611896, which allows operation under WV NPDES Permit No. WV0111457 Multi-Sector Stormwater General Permit.

Technical Comments on WVG611896

Hydrogeologic setting and associated vulnerability of groundwater resources:

Site selection and planning:

It has been well defined that the Rockwool's Ranson facility is sited on Karst geology¹. Despite this information being readily available, when originally permitting the Rockwool facility, the Site Selection Criteria (West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.10) were not followed. "Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s), subsidence, or delineated wellhead protection areas, as determined by the Bureau of Public Health. If areas of karst, wetlands, fault(s), subsidence, delineated wellhead protection areas or other areas determined by the director to be vulnerable based on geologic or hydrogeologic information, are determined to exist then the facility or activity design must adequately address the issues arising from locating in the area(s) of a potentially more vulnerable groundwater resource". This facility should never have been permitted on karst. Rockwool clearly did not describe an understanding of Karst in its original 2017 permit application.

Rockwool should be sited in a more appropriate location.

Karst aquifers are known to be "extremely vulnerable to pollution" due to direct connection between the surface and underlying high permeability aquifers². The groundwater at the Rockwool site is only 60 feet below the ground. Further Karst is known to have "severe ground instability problems"³. This puts buried utilities like sewer and gas lines at risk for damage or

¹ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. Field Guides. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In Sinkholes and the engineering and environmental impacts of karst 2008 (pp. 12-22).

² Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. Earth-Science Reviews. 2014 Nov 1;138:61-88.

Ford D, Williams PD. Karst hydrogeology and geomorphology. John Wiley & Sons; 2013 May 3.

Zhou W, Beck BF. Engineering issues on karst. In Karst management 2011 (pp. 9-45). Springer, Dordrecht.

³ Doerfliger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). Environmental Geology. 1999 Dec 1;39(2):165-76.

failure with subsequent ground or surface water contamination. This makes the “aquifer vulnerability” in karst areas very high⁴.

A simple peer reviewed literature search reveals a plethora of information highlighting the risks associated with development in karst geology and many techniques for studying the impact of development on such land. It does not appear as though the municipality of Ranson employed any of these methods when it incorporated or rezoned this area. However, this oversight or lack of due diligence by Ranson does not absolve the DEP of its responsibility and liability to protect the water resources. Such a search will also reveal many techniques and methods for designing best strategies for limiting risk in a Karst area. It does not appear as though Rockwool employed any of these techniques or guidelines. It seem catastrophic failure of a liner and the contents of the basins escaping into the groundwater resource maybe the only way that Rockwool will know a sinkhole has formed under one of its sediment basins.

It is clear that for decades now policy makers have been using “Aquifer Vulnerability” measures, of which Karst is very high, to set land use and water resource protection policy. The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document *Stormwater Management Design in Karst Areas* states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”

This development is clearly inappropriate for this location. Information to this effect is well rooted in the peer review literature and has been widely available for decades now. Why then would this industrial permit be approved? Rockwool should relocate in a more appropriate location where it is not such a risk to the water resources. Rockwool has clearly not demonstrated an understanding of the importance of the hydrogeologic setting and therefore at least the permit should be denied until it is more appropriately understood and addressed.

Sinkholes:

Karst geology is prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater.

The Rockwool site is located in the area with the largest sinkhole density in Jefferson County (see footnote 1). Furthermore, a study demonstrated that in this area, several factors increased the rate of sinkhole development and these included presence of surface water and development (see footnote 1). Again, the DEP guidance documents agree. The Chesapeake Bay karst stormwater guidance document, which WVDEP cites, clearly states that detention and retention ponds are not recommended on Karst. Again, quoting WVDEP’s own Karst guidance:

⁴ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

“attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Therefore, just by virtue of disturbing the ground on the site and creating ponds as Rockwool is seeking permit permission to maintain, Rockwool will actually increase the rate of sinkhole development.

As of this summer, there were at least 17 sinkholes on Rockwool’s site. Most of these sinkholes are inside of stormwater ponds, with seven sinkholes appearing in Rockwool’s rainwater reuse pond during construction. Rockwool was cited for failure to report a sinkhole, when the first sinkholes appeared in 2018.

The DEP approved Rockwool’s sinkhole mitigation procedure in 2018. First, the sinkhole mitigation procedure allows too much time to pass between the identification of a sinkhole and when it needs to be repaired – time that allows for possible drinking water contamination. The DEP should require reporting within hours of noting the sinkhole, and emergency intervention to happen within 24 hours. The DEP should directly oversee these repairs. Each sinkhole should be evaluated to ensure the optimal remediation procedure is employed⁵. There is no contingency for addressing any new sinkholes, which might open up, nor any discussion of inspecting swales, ditches or ponds related to the stormwater management to check for new sinkholes. Again it seems that the only way Rockwool will know they have a problem is when there is catastrophic failure. As mentioned above Rockwool should be required to have a multimodal detection system for sinkhole development.

In the IEP, Rockwool states, “due to the karst features underlying some of the property, voids and soil filled zones are located within some of the Limestone bedrock. A geotechnical survey conducted in 2017 identify karst anomalies within this property. Following the geotechnical survey and during construction, Rockwool identified and mitigated ten sinkholes on site reported to the WVDEP, as of June 21, 2019, shown on the attached Figure 2A. Rockwool prepared a supplemental Structure Sinkhole Repair document that was approved by the WVDEP to properly repair the sinkholes and mitigate potential contaminant pathways to groundwater. During construction, identified and located sinkholes were remediated following the procedure described in the supplemental sinkhole repair document, approved by WVDEP. The intention of repairwork was to minimize infiltration and additional solutioning.” With repeated mention of “WVDEP approval”, it is obvious that Rockwool is putting the liability with respect to sinkhole management on the DEP. Shockingly, this paragraph is the first mention of karst in the document. This statement is not even correct, as there were at least 17 sinkholes on site at this date.

⁵ Zeng Y, Zhou W. Sinkhole remedial alternative analysis on karst lands. *Carbonates and Evaporites*. 2019 Mar 5;34(1):159-73.

Zhou W, Lei M. Conceptual site models for sinkhole formation and remediation. *Environmental earth sciences*. 2017 Dec 1;76(24):818.

Huckert A, Garcin P, Villard P, Briançon L, Auray G. Experimental and numerical approaches of the design of geotextile-reinforced embankments prone to sinkholes. In *10th International Conference on Geosynthetics 2014 Sep 21 (Vol. 21)*.

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development and earth movement under such liners. In an effort to prevent disaster, Rockwool should be required to install the latest technology in and beneath the liners⁶. In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner stress given the risks associated with failure.

The DEP director can and should require Rockwool to perform routine groundwater monitoring. It is unacceptable that Rockwool has not included this in its plans. With regard specifically to outside material storage and disposal areas, and impoundments, for industrial facilities, West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that "Placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring," and "Groundwater monitoring stations may be necessary to assure protection of the groundwater resource." Given the information cited above about the sinkholes on site and our sensitive groundwater resources, DEP should require regular and frequent monitoring and reporting of groundwater.

Inappropriate storm water design for Karst geology:

In this section, Rockwool mentions 10 sinkholes were identified as of June 21, 2019, however, the number identified at that time was 17. Further they say, "the Level 1 Bioretention Areas are designed so that infiltration is not used." This needs to be clarified. These bioretention ponds are not noted to be lined so it is unclear what Rockwool is referring to when it says infiltration is not used. This needs to be addressed before this permit can be approved.

Topographic and Site Map:

The Multi-Sector General Permit requires a topographic map be provided that extends at least a mile beyond Rockwool's property that shows the following: all intakes and discharge structures, sinkholes, drinking water wells, springs, and surface water bodies. Rockwool's topographic map and site map are deficient. There are several of these features within one mile that are not shown, including known in use drinking water wells, sinkholes, and documented wetlands. Rockwool falsely claims there are no wetlands. Further, Rockwool only depicts 10 of the 17 documented sinkholes on its property and none beyond its property. Mountaineer Gas Company did an extensive Karst inventory of sinkholes prior to installing the natural gas pipeline and those sinkholes are also not discussed or depicted on any maps in the IEP or the General Permit application. Outlet #1 and #2 discharge to a field in the northern area of

⁶ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ. Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

Rockwool's property; it is unclear from the topographical map if there are sinkholes in this area. These deficiencies in the topographical and site maps must be corrected. Further, these deficiencies reflect a lack of respect for the neighboring community and resources.

Buried Utilities:

Rockwool failed to inventory and discuss its existing underground pipelines in the multi-sector general permit. Applicants are required to provide an inventory of all "operations, which may reasonably be expected to contaminate groundwater resources." The following potential sources are specifically listed: Outside materials storage areas, Disposal areas, Loading and unloading areas, Bulk storage and distribution areas, Drums, Sumps, Pumps, Tanks, Impoundments, Ditches, and Underground Pipelines. Rockwool specifically and falsely states that it has zero underground pipelines when, in fact, Rockwool has at least two underground pipelines, including a natural gas pipeline and a liquid oxygen pipeline.

The natural gas pipeline runs between the furnace side of the building and both the Sediment Pond and the Water Reuse Pond, within 10 feet of the stormwater discharge outlets. Rockwool's liquid oxygen runs from the oxygen tanks that sit immediately south of the Stormwater Detention Pond, under the perimeter road and on to the furnace building. This is not an inconsequential fact. As described above, due to the karst geology, these pipelines are at particular risk of damage leading to groundwater contamination or explosion and catastrophic damage. Underground oxygen piping is also particularly vulnerable to damage by lightning, which may ignite the pipe material.

Pipeline ruptures and explosions have occurred all too often as a result of the failure to monitor pipelines for corrosion or cracks. Rockwool has failed to identify any plans for pipeline monitoring. Such plans should be identified and included in any permit, and monitored by the DEP to ensure proper oversight and maintenance. The underground pipelines and their proximity to the Stormwater ponds and conveyances should be discussed in the IEP, as well as monitoring for corrosion and pipeline integrity.

Groundwater Protection Plan and monitoring:

A great majority of the households and agricultural businesses depend on groundwater. If the groundwater were to be fouled, it would devastate our equine and agricultural industry and therefore our economy. It would devastate our local government with restoration cost and legal cost as citizens seek restitution. It would be a major burden to households who will be forced to find alternate undoubtedly more expensive sources of water. We have seen this play out across our state as the unknown consequences of previous industrial and extractive activity came to bear. Here we have the chance to prevent it. We are counting on the DEP to protect the groundwater we depend on in Jefferson County.

The section of Rockwool's multi-sector application for groundwater data is woefully incomplete and demonstrates a cursory analysis of what is truly a foundational concern. The DEP guidelines for successful Groundwater Protection Plan lists the groundwater analysis, data and other related information that should be included. While Rockwool mentions it exist, it barely

addresses it. The plan requires “a discussion of all available information reasonably available to the facility of activity regarding existing groundwater quality at, or which may be affected by the site.” Previous groundwater data and monitoring are easily available from extensive USGS and county research, yet Rockwool doesn’t describe them. Rockwool also fails to describe the geophysical testing done in 2017. The narrative references groundwater data that are included in a table in the appendix, but the appendix section is incorrectly titled, the table has no descriptive text, and does not even label the units of measurement, rendering it useless.

As cited in the sinkhole section above, there are REAL studies that are applicable to the Rockwool site and sinkholes. A USGS study used dye tracer tests to determine rates and directions of groundwater flow within the karst aquifer. Dye was injected into a sinkhole in Shenandoah Junction, about a mile from Jefferson Orchards. Two weeks later the same dye was detected at a monitoring point north of Shepherdstown. Within 20 weeks, it was detected at an additional 5 sites between Kearneysville and Shepherdstown. The study reported movement of up to 840 feet per day – which indicates that contamination, can happen quickly. This sort of information is in fact “reasonably available to the facility” and should have been considered.

The director of the DEP can and should require Rockwool perform routine groundwater monitoring. It is reprehensible that Rockwool has not included this in its plans. West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that groundwater monitoring stations may be necessary to determine if contamination is occurring or has occurred, and also to “assure protection of the groundwater resource.” In section 4.9.c. it goes on to say, “new facilities shall monitor groundwater upon order of the director if the director reasonably believes that an industrial establishment or activity has the potential to contaminate groundwater.” Page 69 of the WVDEP stormwater management guidance document states, “monitoring wells and groundwater sampling may be required by the director for the assessment of the potential for or existence of groundwater contamination.” It is reasonable to believe Rockwool has the potential to contaminate groundwater, and monitoring for groundwater contamination should absolutely be required here. Given what we know about the sinkholes on site and our sensitive groundwater resources, and knowing that 70% of the people in this county drink well water, the DEP should require frequent monitoring and reporting of groundwater.

Gravel Surfaces:

Rockwool falsely claims to have zero graveled surfaces in the footprint of its drainage areas. There are clearly several areas on the site plan that depict gravel surfaces. Two significant ones include a pad near the sewer pump station and a one-acre, non-paved, non-vegetated, outdoor graveled area referred to as the “waste pit” or “melt for reuse” storage area (corresponds to Area B170 in the Air Permit). The waste pit or melt for reuse storage pad is particularly alarming as the things Rockwool plans to store here include, furnace tap out, melt for reuse, waste insulation, returned insulation, and dewatered Water Reuse Pond cleanout. If these items are stored for more than 180 days, Rockwool may need to apply for a RCRA Subtitle D industrial waste storage permit. These unlined areas are susceptible to infiltration and pose a risk to both groundwater and surface water. These areas have not been evaluated and IEP must discuss

these areas and the storage of waste products, by-products, and materials destined to be recycled.

Process wastewater illegally allowed in Outlet #2:

Storm water that runs off site B170 waste pit or melt for reuse area that is described in the above section will go to Bio-retention Basin #2 via a perimeter ditch and then to outlet #2. This water is not stormwater; it will actually be process wastewater. West Virginia Legislative Code §47-10-2.41 defines “process wastewater” to mean any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. As described in the above section, site B170 will contain water and materials that have contacted it processes, and come in contact with the aforementioned products. Discharge of anything other than stormwater is prohibited from outlets. Therefore this is an illegal discharge and should not be allowed.

The Water Reuse Pond is not a stormwater structure:

Rockwool states that “filter backwash” and “heat” water will go to the Water Reuse Pond. Rockwool claims the Water Reuse Pond is a stormwater management structure. However, “filter backwash” and “heat” are considered pollutants by the EPA (40 CFR 122.2). Therefore, these materials are process-related industrial pollutants. Further, the pipe that carries these materials to this pond must be treated as a point source of industrial effluent and regulated as an outlet. Rockwool describes in the IEP that runoff from to this pond could, “contain dust from handling of raw materials for the melting process, which would include solid materials such as stones, slags and melt for reuse items,” and this pond could receive sprinkler system drainage from inside the binder storage building. By design, the pond has no outlet for overflow. During construction, 7 sinkholes formed inside of this pond. It is now designed to have a triple liner to prevent further infiltration to groundwater. So, with no outlet and a liner, this is actually a pool, and by Rockwool’s own admission, it may contain more than just rainwater. This pond cannot be classified as simply a stormwater management structure. This pond must have threshold-monitoring requirements with routine sampling of the contents.

The IEP describes how this pool is sized for a 100-year rain event, and in the event that it is approaching capacity due to a large storm event, Rockwool can store and treat the water. “For example, RAN5 could employ water tank trucks to haul off water to be treated at a designated publicly owned treatment works.” It is unclear which POTW they are referring to. If it is Charles Town, this should have been described in the NPDES modification that was approved on March 1, 2019. Since it was not described, it should not be allowed by the Charles Town Utility Board (CTUB). This is too serious a risk to not be specifically addressed. Rockwool must amend its application to identify what is the trigger for the preparation for a “heavy rain event,” where are the water tank trucks going to come from, if the trucks are contracted how will Rockwool ensure that they are actually available when needed, how will it ensure that the drivers and operators of these water tank trucks are actually properly qualified to be handling contaminated water, and most importantly where will these trucks dispose of the contaminated water? What location has agreed to take such water?

Rockwool should be required to test the contents of each tanker truck before it is hauled away, to ensure no hazardous materials are mixed with rainwater, and that the trucks are not then contaminated for further water hauling. This should be further evaluated and well defined in the Rockwool permit application.

Potable water used for Fire protection is admixed with stormwater:

The Multi-sector General Permit has a pure prohibition of non-stormwater discharges. The discharge water that Rockwool seeks permit coverage for contains a significant volume of treated well-water (potable water), supplied by Jefferson Utilities Inc. (JUI), that will be used for fire protection. Rockwool's site plan (approved by the City of Ranson) calls for a fire protection water line, supplied entirely by potable water. Rockwool's Industrial User NPDES permit, issued to the Charles Town Utility Board (CTUB) on March 1, 2019 (WV0022349), the potable water flow for fire suppression will be 75,268 gallons per day. This is a significant amount of water and well water used for fire suppression is not stormwater. Yet, the water from fire line flushing, training, and actual fire fighting would flow through all three of the drainage areas, and would convey to all four stormwater management structures. Rockwool must thoroughly and appropriately characterize how the potable water discharges related to fire protection will be handled so that it does not mix with stormwater. The permit must be modified to address this important issue. .

Rockwool's IEP fails to identify all of outdoor process activities:

According to Rockwool's air permit (R14-0037) describes a "melting furnace portable crusher" as an outdoor process. This process is a significant source of dust and fugitive particulate matter, third only to the two steam stacks. This process is planned at least quarterly. The air permit describes this process as occurring in a dedicated area that is uncovered and unpaved, B170. Therefore, B170 is also a materials processing area in addition to a storage area for process-related industrial pollutants as described in a previous section. Again, this area is uncovered, unlined, and about 20 feet from the Water Reuse Pond and Bioretention Basin #2. This outdoor process must be considered in the IEP.

IEP fails to address the potential for dust and particulate contamination of stormwater discharges:

Rockwool will produce fugitive dust and particulates that may contain formaldehyde, menthol, phenol, silane coupling agents, and other hazardous substances. Several processes generate fugitive dust, including the portable crusher operation mentioned in the previous section. This process is entirely uncontained and uncontrolled by any pollution control devices. In addition, Rockwool's controlled processes will produce up to 134 annual tons of PM2.5 and 154 annual tons of PM10. Air modeling suggests that the bulk of the dust and particulates will fall out within Rockwool's drainage and be deposited on building roofs, asphalt surfaces, parking lots, roads, and vegetation. The stormwater, which falls on these surfaces, will capture the dust and hazardous particulates contained within and convey them to the stormwater and bioretention ponds and outlets. As a consequence of the toxic nature of the underlying contaminants, these captured contaminants have the potential to negatively impact groundwater and surface water.

The effect on water resources has not been evaluated and needs to be addressed before this permit is approved.

Internal plumbing plans should be included in the application:

The IEP shows that the Stormwater Management Pond that drains areas HrC and HeB, which covers parts of the manufacturing facility, discharges to a field north of Rockwool through Outlet #1. This Outlet #1 is expected to have discharge of 86,330 gallons per day. Is all this water in fact stormwater? Further in section 4.4.7 of the IEP it states, "no interior building floor drain is designed for connection to the storm drain system." Does this mean it will not connect or it may inadvertently even though it is not "designed" to do so? This should be clarified. It continues in this section to say that "floor drains in office space, bathrooms, and other areas are directed through the sanitary sewer to Charles Town WWTP." These "other areas" need to be clarified to determine where the other areas are and where they discharge. It is unknown if these "other areas" include process area floor drains and if these drain to the Charles Town WWTP. The DEP must require that the application contain the internal plumbing plans, to determine that no process water from the facility is expected to be discharged into ponds with a discharge to the natural environment. No permit should be issue until this matter is specifically resolved.

Storage of unknown chemical in close proximity to water rescors:

Seven of the 13 Aboveground Storage Tanks (AST) on site have undisclosed contents and hold 88,500 gallons of unknown chemicals. If the contents of the ASTs are unknown, there is no way to determine if the ASTs are in compliance with 47 CSR 63 (AST Design Construction and Installation), or if proper and adequate containment is provided. It is impossible to evaluate the application for adequate groundwater protection water recourses absent this information. Further, it is reckless to allow unknown industrial chemicals this near stormwater ponds, sinkholes, and water supply protection zones on karst geology.

Additionally, there is no information provided about Rockwool's plans to monitor and ensure tank integrity. The risk of corrosion, leaks, and vapor releases from storage tanks has resulted in multiple disasters in this country. Rockwool's permit application must include its plans for tank integrity inspection.

If there were a spill, the public utility leaders would need to know the contents immediately. This information needs to be on file so an appropriate plan can be made before it is an emergency situation. Disclosure of the contents of these ASTs is imperative, required by statute, and should be part of the permit. Until this information is included with specificity the permit should be denied.

Substantial Harm Determination:

The Rockwool Facility is located such that any toxic release to groundwater or surface water form the facility would shut down at least one public water supply and should therefore be classified with a Substantial Harm Determination. Harpers Ferry sources their drinking water from Elk Run, Jefferson Utilities Inc. from the aquifer, and Shepherdstown from Rocky Marsh

Run. Additionally, there are thousands of households, businesses, and farms that source their drinking water for humans and animals from private wells in the aquifer. As discussed in the karst section of this document, the aquifer is contiguous over a long area of the county and the flow rate of the aquifer is rapid. A Substantial Harm Determination would require some relevant safeguards be in place.

Waste material usage:

Rockwool states, "No wastes or waste materials are used for deicing, fills, or any other uses on site unless provided for in an existing rule." The 'existing rule' needs to be further defined so that it can be determined what material is being used for what. The permit should not be approved until this is done.

Inappropriate Facility Design, Control, and Operations:

This sections states, "storage of solid waste or recycled material is constructed with an appropriate concrete surface that is chemically resistant to waste or recycled material. Liquid is not stored in designated solid waste or recycled material areas and containers that are outside have cover lids. The collection system is connected to the process water system and does not discharge to the stormwater outfall."

The solid waste area needs to be lined, in addition to a 'concrete surface that is chemically resistant.' DEP guidance for stormwater controls says it **requires** "the employment of mitigating practices to eliminate potential contaminants from reaching the stormwater structure." Although the rainwater reuse pond is lined, there is still a risk of groundwater contamination via this structure, as there are 7 sinkholes under the pond already. Therefore, more needs to be done to prevent waste products reaching the rainwater reuse pond.

Also, the gravel pit discussed earlier and labeled "waste pit" or "melt for reuse" storage area will also contain waste and it is also unlined. However, this will come into contact with liquid as it is uncovered and is the destination for dewatered sludge form other ponds. These areas have not been evaluated and they must be addressed along with the storage of waste products, by-products, and materials destined to be recycled. It is possible the RCRA should apply here. The permit should not be approved until this issue is specifically addressed, including an analysis of whether RCRA applies to these activities; and, if so, whether proper regulatory action has been taken.

Inappropriate description of ponds and site runoff design:

Rockwool states, "the outfall discharges water onto an outlet apron during discharge to maintain non-erosive discharge velocities." The outfall apron needs to be better described and monitoring parameters with action trigger points need to be defined to prevent erosion and sinkhole formation. Rockwool further states in this section, "for construction activities that will disturb the soil, appropriate notifications or applications are made to the WVDEP and Jefferson County to ensure compliance with local and state requirements. The site is currently continuing construction under approved West Virginia Construction General Storm water Permit, WV 108876." This is already inaccurate and not being followed. Rockwool did not apply for

coverage under the statewide stormwater construction permit in a timely manner, and has been operating without coverage. This fact must be taken into consideration when making final decisions regarding the trustworthiness and reliability of Rockwool.

Administrative Comments on WVG611896:

There are also administrative reasons that the permits should not be approved. The Multi-sector permit is for post-construction activities and should not be authorized until all construction is complete. At this time, the construction permits have not even been completed. A version of Rockwool's Multi-sector permit was released by DEP to WV Rivers Coalition on October 21, 2019. The PDF contains the word "draft" but the document itself is not stamped draft. A letter, which was not dated, that was sent from DEP to Rockwool says that the permit has already been approved. This coupled with the PDF not being stamped is concerning because the public comment process is not even finished. If the permit was actually approved prior to the public comment period being completed and the issues raised by the public resolved, that would be a violation of the process for granting the permit. Please explain whether this permit was actually already granted, and by whom? If not granted, please explain the letter.

Further the State-wide Multi-sector permit was just renewed on October 12, 2019. This most recently approved version is more protective of the environment and people than was the previous iteration and therefore requires companies like Rockwool to be more vigilant and responsible. Is this why Rockwool's Multi-sector permit was effective on October 12 under the previous iteration of the state wide multi-sector permit that is less onerous and far less protective of our environment and our drinking water? We expect an explanation for the date of issuance, and whether the approval in accordance with the previous Multi-sector permit regulations was actually granted prior to this process being completed. We believe that this may give rise to a legal challenge on the validity of the permit.

Rockwool is a new facility, is not yet operational, and has not submitted a correct or complete application as of yet. The Draft Permit Registration should be corrected to reflect Rockwool's potential operation under the 2019 WVDEP EPA-approved WV NPDES Permit No. WV0111457. However, we believe that when and if Rockwool is able to submit a complete and accurate application that is truly sufficient to protect our ground and surface water resources, this should be an Individual WV/NPDES Water Pollution Control Permit and not a Registration under Permit No. WV0111457. We believe that under 47 CSR 10 Section 13.6.B.2.a that the WVDEP director should require Rockwool to maintain this separate permit that will provide more protection to our groundwater resources.

Inappropriate Signatory:

In section 4.6, it states "4.6.a.1.A. A president, secretary, treasurer or vice-president of the corporation in charge of a principle business function or any other person who performs similar policy or decision making functions for the corporation; or 4.6.a.1.B. The manager of one (1) or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars

(\$25,000,000), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.” The IEP is signed by Mark Graves; to our knowledge, he does not qualify as a signatory. This is significant, because the permit may have been more accurate if one of the above-mentioned individuals had signed it under penalty.

Public Comment on Roxul’s Permit Registration No. WVR108876 Reissue #2 for Coverage Under the General WV/NPDES Water Pollution Control Permit No. WV0115924

Technical Comments on WVR108876 reissue #2:

Inaccurate limit of disturbance:

According to Deed Book 1197 Image 672 Section C, Section D and Section 2, Rockwool was granted a 5.7 acre construction easement. This acreage should be included in the limit of disturbance (LOD). This would take the LOD to 104.5 acres, triggering the requirements for LOD greater than 100 acres. This is a material and substantial alteration and addition to the permitted facility that is not represented in the existing permit. As required under 47 CSR 10, Section 9.2.b in accordance with Section 10 and the public notice procedures of Section 12, should this information have been reported when it was finalized on October 25, 2019, and should this permit application be revised to reflect this addition?

In addition, defined in the DEP LOD rules, “disturbed area” should include the Water Line, Gas Line, and Planned Sewer Line disturbances that occurred on Rockwool property must also be considered part of Rockwool’s LOD. Further, the previously submitted soil maps in the original 2018 approval of WVR108876 suggest the LOD, based on soil type, to be greater than 100 acres.

These facts have not been taken into consideration in connection with the Permit Reissue and must be prior to any final issuance.

Sinkholes:

Sinkholes, as noted above in the technical comments for the multi-sector permit, are a significant concern as they lead to direct contact of ground water with surface water and any contaminant that surface water may carry. Rockwool doesn’t seem to appreciate or understand this issue. . On July 19, 2019 a DEP permit reviewer requested additional information, “Sinkholes. Include table or color code to denote status of sinkholes.” Rockwool failed to respond in either the application or the draft. The locations of 10 sinkholes are noted, but there are 17 documented sinkholes.

There is no information about current mitigation status of currently documented sinkholes, contingency for addressing any new sinkholes or of detection strategies for new sinkholes in swales, ditches or ponds related to the stormwater management. Under this permit, the only way that Rockwool will know a sinkhole has formed under its sediment basins is when

catastrophic failure of the liner occurs and the contents of the basins escaped into the groundwater resource. This is completely unacceptable.

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development and earth movement under such liners, in an effort to prevent disaster. Rockwool should be required to install the latest technology in and beneath the liners⁷. In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner stress given the rinks associated with failure.

Receiving Stream:

The receiving stream is again listed incorrectly as Elk Run. Again, the correct stream is Rocky Marsh Run, as is noted on DEP's inspection reports for Rockwool. Naming the right stream is not difficult to do! Yet this is not an inconsequential matter. In fact, it is critical. Understanding the watershed is central to these permits because the whole point of these permits is to protect the water resources!

Inappropriate and ill-defined flows:

Rockwool claims that Outlet 1 will have 86,330 gallons of stormwater flow per day and Outlet 2 will have 10,207 gallons of stormwater flow per day for a sum of 96,537 gallons of stormwater per day. Oddly, this seems high; more peculiar still is that it is nearly equal to Rockwool's average projected industrial wastewater discharge volume of 97,650 gallons per day, as obtained from a flow diagram to the Charles Town Utility Board for their NPDES permit (WV0022349) modification. Why are these numbers so high and what is the significance of the similarity?

Public Notice Sign:

The permit required signage at the site is and has been incorrect since it was installed. It has the incorrect date and was originally installed in the incorrect location. This needs to be addressed prior to the issuance of any permit.

Unresponsiveness to Technical Requirement of Outlet Design:

Velocity dissipation devices are required by the General Permit for the two designated outlets, to limit erosion and sinkhole formation. However, Rockwool's Sediment & Erosion Control Plan only calls for a "flow spreader" (Appendix B, Figure 2). This is inadequate to meet the General

⁷ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique.

Jentsch H, Basedau F, Schwartz A, Witt KJ. Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

Permit requirements and will not protect against erosion. The General Permit requires "Outlet protection from a pond, waterway, diversion or culvert must extend as a properly stabilized waterway to a natural stable waterway." The outlets are depicted as discharging to an open field. This open field will not act as a natural stable waterway in this karst environment, especially with the potential discharge of 96,537 gallons per day.

This issue must be addressed prior to the issuance or reissuance of any applicable permit.

Administrative Comments on WVR108876 reissue #2:

The public has not been given information to understand which version of the statewide stormwater construction permit Rockwool would be authorized under. The first "2019" version, EPA approved and was effective February 9 of this year, was challenged by some industry groups, and the resulting settlement produced major changes which weakened the permit. Those changes are still pending, because the EPA has not yet approved the revised permit. Which version of the 2019 statewide permit will Rockwool be authorized under? The first version, or the version with substantial changes? The permit should not be approved until this is made known to the public and the public is given time to comment.

Rockwool did not apply in a timely manner for the new 2019 permit and is currently operating without a permit. The 2012 permit it had been authorized under has expired. Again, DEP has not answered our direct questions about this. Any discharges that Rockwool is generating at this time, may be unauthorized and in violation of the Clean Water Act. This kind of flagrant disregard for the rules is unacceptable.

Rockwool began an application process to re-issue its stormwater construction permit in the fall of 2018, but withdrew it for unknown reasons. In November 2018, Rockwool went over one year in construction, and had substantial changes due to sinkhole remediation, yet DEP allowed them to operate without completing the application for re-issue.

Rockwool should be required to stop construction until this current application is approved. DEP stormwater management guidance document notes that groundwater protection plans need to be in place BEFORE stormwater structures are built.

Comments on Rockwool's Competence and Character for both WVG611896 and WVR108876 reissue #2:

We believe that as career officials and environmentalists, you care about the environment and both how that environment affects quality of life and public health, as well as how human activity and industry affect the environment. For its part, Rockwool has shown from site selection to the careless and the downright negligent way that it has produced applications and

conducted itself, that it has no such respect or care for our environment, our health, or our way of life. As we have highlighted, this is an abhorrently inappropriate location for such an installation and the current iteration of the permits do not go nearly far enough to protect the environment or the public. Further, the level of errors and misrepresentations in every permit Rockwool has submitted and its inability to comply with those permits demonstrates either sheer incompetence or intentional misrepresentation and negligence or both. We want to highlight a few of the many errors, incorrect information, and sloppy report preparation over several permits that call into question Rockwool's ability to hold a permit and operate in accordance with laws and regulations. Attached is a more extensive but not exhaustive list.

In its 2017 application for stormwater construction, Rockwool named the wrong receiving stream on its permit application. The correct receiving stream is Rocky Marsh Run. A year later, Rockwool continues to be inconsistent about this simple fact, using six different incorrect stream names. Sometimes, it correctly names Rocky Marsh Run, in other places, it names other streams, including Shaw Run, unnamed tributary to Elk Run, Pikeside Channel, Cold Spring Run, Opequon Creek, and Evitts Run. Naming the right stream is not difficult to do! This is not an inconsequential matter. In fact, it is critical. Understanding the watershed is central to these permits, because the whole point of these permits is to protect the water resources!

On its multi-sector permit application, Rockwool indicated that its two stormwater outflows were going to be discharged to Evitts Run, which is incorrect, as we just noted. Rockwool also said stormwater was going to the city of Charles Town stormwater management system, which doesn't even exist! At DEP's request, Rockwool has since fixed this error, but it is such a glaring error that one has to ask: was this incompetence or intentional? Again, the correct stream is Rocky Marsh Run. This is important because this stream is in the source water zone for Shepherdstown's water supply! Even more disturbing is that Rockwool does not include the nearby source water protection area for Shepherdstown in its Spill Prevention, Control, and Countermeasure plan. This is alarming because as the receiving stream Rocky Marsh Run and therefore Shepherdstown's water would clearly be affected by a spill. This demonstrates a disregard and carelessness toward the effect they will have on the local water resources.

On permit applications, Rockwool has repeatedly given construction timelines that were many months to years shorter than was actually needed. Rockwool has repeatedly failed to check the box on its applications for "Grading period to exceed 1 year" and sign the associated statement for billing for public notice. This was not simply poor estimation as on the first stormwater construction permit reissue Rockwool responded to application section 10 entitled *Estimated Start and Completion Dates for Project*: "Start: October 2, 2017 Completion: September 2019" This was over 1 year, yet the checkbox was not marked. In May of this year, Rockwool requested and had a termination inspection for its stormwater construction permit. It was clearly not finished site work at that time. The termination was denied for this fact. But what prompted this termination inspection? Was it done in good faith? This demonstrates a general disregard for the requirements and standards.

Rockwool has already been cited for six types of non-compliance of its stormwater construction permit including failure to report a sinkhole. This is deeply troubling because sinkholes are precisely the thing that could have a catastrophic effect on our groundwater and surface water resources. This failure to comply demonstrates either an unacceptable level of incompetence or a disregard for the requirements that rises to the level of malfeasants.

These permits should not be approved and we ask that under 47 CSR 10 Section 13.6.B.2.a that the WVDEP director should require Rockwool to be approved for and maintain an individual WV/NPDES Water Pollution Control Permit and not a Registration under Permit No. WV0111457.

Request for an Evidentiary Hearing for WVR108876 reissue #2 and WVG611896:

Environmental regulations are based on the premise that Permittees, such as Rockwool, operate in accordance with the rules and regulations that have been established to protect the public from environmental contamination and degradation, Rockwool has a duty to comply with all conditions applicable to all permits. WV 47 CSR 10-5.1 To this end there is a relatively complicated and integrated environmental protections regulatory scheme that is supposed to provide that protection, and it is effectively dependent upon voluntary compliance and truthfulness.

It is not possible for the government to be present at every potentially hazardous or contaminating event – every time a worker opens a valve to discharge hazardous chemicals or polluted process water, or every time there is manufacturing malfunction. So, industry is supposed to comply with the laws and follow the requirements of the permits that govern their activities. The Statute clearly states, “The permittee must comply with all conditions of this permit.” WV 47 CSR 10-5.1.(a) In order to comply, a company must be both competent to operate in accordance with those rules and requirements and have the character and integrity to be honest about the inevitable malfunctions, unknown human errors, and unanticipated events that pose a risk to the public.

Rockwool has not demonstrated either the character or competence to be given the permits that it seeks to operate in Jefferson County. As noted throughout this submission, it has provided inadequate, incomplete, inaccurate and misleading information upon which it requests approval for the DEP. Where, as here, Rockwool has failed to “disclose fully all relevant facts, or the permittees misrepresentation of any relevant facts at any time” the Permit may be Suspended or Revoked. WV 47 CSR 10-9.4.a. Rockwool has done just that and provided inaccurate, incomplete and deceptive information designed to frustrate the attempts of the DEP to review and understand its plans and processes. The DEP is a resource stressed organization, with only a few professionals to evaluate the permits, and legions of lawyers from Rockwool to pressure DEP to approve its permits regardless of the information provided.

DEP operates its program under an Agreement with the federal Environmental Protection Agency (EPA), and all applications for permits under the National Pollutant Discharge Elimination System (NPDES) Program must meet the requirements of the EPA approved process. WV Code 47 §47-10-2.3, and the federal Clean Water Act §307, 308, 402, and 405.

As you know, any permit issued “may be revoked, suspended, revoked and reissued, or modified during its terms for causes as set forth in Section 9...” WV Code 47-10-3.4. In addition, where as here, there are conditions of the permit that do not provide for compliance with the applicable requirements of the federal Clean Water Act and the State Acts, no permit should issue at all. WV Code 47 §3.6 (a). So, for example, all of the issues raised above regarding the Karst geology and the risk posed for groundwater contamination have not been adequately addressed and Rockwool can not comply with the requirements of the federal Clean Water Act or state regulations. This is a serious issue that, in its present configuration, make compliance virtually impossible. Additionally, various risk factors identified above, have not adequately been explained, such as the unspecified and undesignated water tankers removing contaminated pond water in a heavy rain event. This, and other issues, confirm that no permits should be issued to Rockwool until adequately and completely addressed. Rockwool has also demonstrated that it does not have the character to be trusted to provide truthful information upon which the department can rely. Although Rockwool’s Vice President Kenneth Cammarato signed the Construction Stormwater Permit application, under the penalty of fine and imprisonment for submitted false information, 47 CSR 4.6 (d), there are several places in the submittal that contain demonstrably false information. As described above, and in other comments, the size of the “limits of disturbance” is the relative timeline for sediment disturbance. Originally, in 2017, the representation was for a mere 21 weeks, now we are already at 10 months of earthwork. See, other comments submitted for additional information on inaccurate and incomplete information regarding the length of time for the grading phase of construction, the size of the area being developed, i.e., more than 100 acres.

For all of these reasons, the citizens of Jefferson County suggest that merely submitted public comment to the Agency for review is inadequate to demonstrate the Rockwool should be granted the permits it seeks. Under the federal Clean Water Act, and other federal statutes, the state of West Virginia must demonstrate that it is able to investigate, review and then monitor any environmental permit that is issued. That it cannot do, and we request that in acknowledgement that the public in this case is more equipped to provide expert review and assessment of the permit applications that apply to our land and our water. We request that we be provided the opportunity to present such expertise at an evidentiary hearing where DEP is able to accept testimony from environmental experts on the reasons that the Rockwool should not be allowed to operate its facility in the location it is building on, hear Rockwool’s answers and explanations and make a determination after the receipt of such expert opinions and analysis. While not provided for by statute, it is also not prohibited by statute, and the Director has the full discretion to grant this request. WV 47 CSR 10 -5.8 “Duty to Provide Information,” requires that the permittee shall furnish to the Director “any information that the Director may request to determine whether cause exists for modifying, revoking, and reissuing, suspended, or revoking this permit or to determine compliance with this permit.” In this case,

the Director could require Rockwool to participate in an evidentiary hearing process as part of the permitting application and, upon receipt of the expert testimony and information provided to the DEP by the public, require Rockwool to respond to the information. Thus, making a decision, based on facts and evidence that challenges the inaccurate and incomplete information which Rockwool has submitted.

Best Regards,



Christine L Wimer MS, DVM, DACVS-LA
President, Jefferson County Foundation, Inc.

Enclosure: List of Permit Errors and Inaccuracies

Jefferson County Foundation, Inc.

January 26, 2020

The Honorable Austin Caperton
 Secretary of the West Virginia Department of Environmental Protection
 601 57th Street, SE
 Charleston, WV 25304

Re: Industrial Stormwater Permit Application No. WVG611896

Dear Secretary Caperton,

Jefferson County Foundation respectfully submits the following comments on Rockwool's Multi-Sector Industrial Stormwater Permit Application No. WVG611896 and petitions the West Virginia Department of Environmental Protection (WVDEP) pursuant to West Virginia Legislative Rule 47CSR10 Section 13.6.b.2.A to require Rockwool to obtain a valid individual permit so that appropriate protections and oversight can be applied by the WVDEP to address all of the unique concerns the Rockwool facility poses. Among the reasons the WVDEP should grant our petition are that:

- Rockwool is a significant contributor of pollution and as such should be required to obtain an individual permit.
- Rockwool's facility is being located in a hydrogeologic setting with vulnerable groundwater resources, which can only be protected via the careful and tailored use of protective measures able to be imposed via an individual permit.
- Rockwool plans novel methods that are unlike those used in other mineral wool facilities in West Virginia and thus an individual permit is needed to appropriately protect the waters of the state.
- 11 other specific concerns have been identified that require an individual permit to be adequately addressed.

In support of this petition, below we provide a detailed explanation of our concerns.

1. Rockwool is a significant contributor of pollution and should be required to obtain an individual permit. (47CSR10 Section 13.6.b.2.A.1)

The Rockwool facility in Ranson, West Virginia will produce significant amounts of pollution in Jefferson County, West Virginia and the surrounding area. This pollution will endanger waters of the state including the groundwater and surface water resources of Jefferson County which are particularly vulnerable due to the hydrogeologic setting. The Rockwool facility's planned

PO Box 460, Ranson, WV 25438
 Jefferson County Foundation, Inc. is a 501(c)3 Non-Profit organization.

activities threaten the drinking water of tens of thousands of people in Jefferson County, Maryland, and Northern Virginia as well as the water quality of the Chesapeake Bay.

For example, Rockwool plans to release pollutants to the air which will fall to the ground and threaten local waters. Rockwool's air permit to construct a stone wool insulation manufacturing plant (R14-0037, April 30, 2018), issued by WVDEP's Division of Air Quality, allows for Particulate Matter less than 2.5 microns, 133.41 tons per year (TPY); Particulate Matter less than 10 microns, 153.19 TPY; (total) Particulate Matter, 250.87 Tons Per Year; Sulfur Dioxide, 147.45 TPY; Oxides of Nitrogen, 238.96 TPY; Carbon Monoxide, 71.40 TPY; Volatile Organic Compounds, 471.41 TPY; Sulfuric Acid Mist, 16.37 TPY; Total Hazardous Air Pollutants, 392.59 TPY, Greenhouse Gases (CO₂e), 152,935 TPY, and classifies the Rockwool Ranson site as a Major Stationary Source of air pollution subject to New Source Review and Prevention of Significant Deterioration (PSD).

Rockwool's air modeling suggests that the bulk of the dust and particulates will fall out and be deposited within the plant boundaries on building roofs, asphalt surfaces, parking lots, roads, and vegetated areas within Rockwool's drainage¹. For example, the PSD modeling result is that the Significant Impact Area for PM₁₀ maximum concentrations is within a circle, centered on the facility, and extending only 0.45 miles to 0.78 miles. That means the majority of the PM₁₀ will fall within the fenced portion of the plant, as can be seen in Exhibit A, in which the AERMOD modeling runs show the spatial concentration distribution of pollutants that exceed the Significant Impact Level (SIL) for PM₁₀ at the 24-hour NAAQS standard (exhibit A1) and the annual NAAQS standard (exhibit A2). The modeling runs show that the maximum PM₁₀ concentrations (in ug/m³) will occur almost entirely within the outlines of the Rockwool facility². This indicates that, by mass, there will be significant outfall of PM₁₀ pollutants on the drainage areas going to the two sediment ponds. Stormwater that falls on these surfaces will entrain the hazardous particulates and dust and convey them to the stormwater and bioretention ponds and outlets. In the case of Rockwool these particulates and dust are in fact hazardous.³ Entrained particulates and dust—due to the toxic nature of the underlying contaminants—has the potential to negatively impact groundwater and surface water. As stated on their application for Multi-Sector permit registration, Rockwool's site will generate a discharge of 86,330 gallons per day (GPD) from Outlet 1 and 10,207 GPD from Outlet 2. Thus the stormwater runoff from the Rockwool facility will contain a significant amount of pollution.

In addition, many of the processes described in the air permit generate fugitive (uncontrolled) emissions. For example, the air permit allows for an outdoor process called the melting furnace portable crusher. The crushing activity will occur outside in a dedicated area that is uncovered, B170. Material that is crushed will drop into a waste pit. Notably, the portable crusher operation is entirely uncontained and uncontrolled by any pollution control devices. This

¹Table 4.1 Summary of Facility Impacts and SIL/SIA Analyses, pp. 35-36, ROXUL Air Quality Modeling Report 12-18-2017.pdf

² Attachment 4, AERMOD Concentration Plots, Appendix C, ROXUL Air Quality Modeling Report, Dec. 18, 2017

³ "Mineral fiber emissions were conservatively assumed to be equal to Filterable Particulate Matter emissions... The listed Hazardous Pollutant (HAP), fine mineral fibers, includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral-derived fibers) of average diameter one micrometer or less." from the Roxul Application for Permit to Construct, Nov. 20, 2017

crusher is a significant source of dust and fugitive particulate matter, the third highest source after the two cooling towers. Fugitive dust and particulates generated via Rockwool's many processes may contain formaldehyde, menthol, phenol, silane coupling agents and other hazardous substances. Best Available Controlled Technology (BACT) limits imposed on the crusher are limited to operational time limits (540 hours/year). The EPA noted in its comments on the air permit "It is the EPA's understanding that limiting hours or operation, or limiting throughput is generally not considered BACT."⁴ Rockwool plans to bring the crusher on-site at least quarterly in order to crush waste for re-melting in the furnace. The material that is crushed is of unknown composition, but will likely include: slag waste from aluminum manufacturing, fine coal dust, coal ash, carbon anode waste (possibly including heavy metals such as molybdenum). This material both before crushing and after crushing will be stored in an open top location, subject to rain. It is difficult to determine if this area is gravel or concrete as it appears to be labeled gravel in several site maps (Exhibit B). The leachate from this storage pile may contaminate groundwater.

In addition, the apparently planned mixture of process water with stormwater water, to be held in on-site ponds, threatens local waters. Pollutants produced by the manufacturing process at the Rockwool Ranson facility are captured in process water, which currently available information indicates can then mix with stormwater, with the resulting mix retained in open ponds. These pollutants are not permitted to be removed via the sewer system to Charles Town Utility Board (CTUB) wastewater treatment plant. The WV/NPDES permit No. WV002349 Modification No. 8, which is the modification of the CTUB NPDES permit that allows CTUB to accept Rockwool's effluent, specifically states the following:

"The permittee may accept non-domestic wastewater from Rockwool (IU02) for treatment and disposal at the Charles Town's main wastewater treatment plant (design flow of 1.75 MGD). The non-domestic wastewater approved for acceptance consists of RO reject wastewater and water softener wastewater from the treatment of finished drinking water from Jefferson Utilities, Inc. The maximum daily volume accepted shall not exceed 17,000 gallons per day. The actual volume of the non-domestic wastewater accepted shall be measured and recorded daily. The acceptance of any other non-domestic wastewater is prohibited."⁵

Therefore, only domestic sewage, reverse osmosis (RO) reject wastewater, and water softener wastewater from the treatment of finished drinking water is permitted by WVDEP to be discharged to the CTUB sewer system. The CTUB sewer system is the only sewer system that is currently permitted to take effluent, domestic or industrial, from the Rockwool Ranson plant. In addition, the discharge of any amount of stormwater to the CTUB sewer system is specifically prohibited in the permit.

In a letter dated November 26, 2019 from the plumbing engineer retained by the Charles Town City Council, Mr. Christopher M. Echenrode, P.E. Senior Project Engineer of Gwin, Dobson, and Foreman Engineers, to Mr. Hennessy, the city manager of Charles Town, Mr. Echenrode

⁴ EPA Comments on Draft Permit Number R14-0037-00108 ROXUL USA, Inc., April 25, 2019.

⁵ WV/NPDES Permit No. WV0022349 Modification No. 8, Modification 1.

posed 18 questions and comments about the internal plumbing plans of the Rockwool facility that he had been asked to evaluate. The eleventh question was as follows.

“Where are the proposed ‘process water’ lines being returned? Why are floor drains and trench drains connected to the ‘process water’ lines and not the sanitary sewer? It was noted that the ‘process water’ lines are accepting the downspout flow. Does the system have sufficient storage capacity to handle heavy rain events? Please confirm if any ‘process water’ enters the sanitary sewer system.”

These questions were answered in a letter to Mr. Hennessy dated December 13, 2019 by Daniel Ferrell, P.E. Principal in Charge of the Thrasher Group, Inc. the engineering firm hired by Rockwool. The answer to the above question was as follows:

“RESPONSE: All ‘process water’ is collected, treated and used within the production building via the closed loop system within the manufacturing process. All floor drains and trench drains are connected to the process water system to maximize water usage efficiency and eliminate any potential discharge of unwanted flows outside of production areas... It can be confirmed that the process water system is closed loop with no effluents and/or interconnections to the sewer system.”

In fact, however, this system is only closed loop in that no effluent from the process water enters the sewer system. In contrast to what is stated in the above excerpted quote, as shown on the plumbing plans, the process water enters the storm drain system, and drains into a settling pond (exhibit C). From the settling pond, it flows over a weir into an open retention pond where it is held until drawn back into the process area via a pipe and pump station. While in residence in the retention pond, volatile organic compounds (VOCs) such as formaldehyde, phenol, and methanol carried within the process water steam are emitting into the air and potentially leaking into the groundwater. The solid particulate pollutants carried into the basin are expected to settle from the water in the settling basin and get scooped out of the settling basin with heavy equipment to be reincorporated back into the process.

An example of this loop can be followed starting on plan page PA0201.1 and PA0201.2 (Exhibit C). One can see that the process water from multiple floor drains and a trench drain enters a filter then enters a pipe labeled storm drain. On plan page PA0201.2, it is seen that process water exits the manufacturing process and the process area via the pipe labeled storm drain and presumably mixes with stormwater as the label for the pipe implies. Plan page P0206 shows these storm drains exiting the building. Plan pages 000-024 and 000-015 show these storm drains (red dotted line) entering the storm drain system and draining into the settling pond.

This demonstrates that process water and stormwater are combined and retained in open ponds. As no process water is permitted to leave the site via the sewer system, this loop system is the reservoir for all pollutants not exiting the system via pond evaporation or through the smoke stacks.

This is a novel system not used previously by Rockwool. Rockwool in Mississippi has a pretreatment facility and its process water is treated at that facility and disposed of via sanitary

sewer. It is not a system which is used by any other mineral wool manufacturer in the state of West Virginia, or in the United States for that matter. This system poses several severe risks of marked pollution of the groundwater aquifer (considered water of the state in West Virginia) in Jefferson County, risks made much worse by the unique hydrogeological features of Jefferson County. This is of substantial and valid concern as a majority of the residents of Jefferson County depend on groundwater as their only source of water.

2. Rockwool should also be required to obtain an individual permit due to the unique hydrogeologic setting and associated vulnerability of groundwater resources in the area in which Rockwool Ranson plans to operate.

Rockwool and its the rainwater for reuse pond, are in extreme proximity to the ground water aquifer and, therefore, to the waters of the state. There are several other relevant factors including the unique hydrogeologic setting, and high aquifer vulnerability in this location. Further, if the ground water is contaminated in this location, tens of thousands of people stand to be affected in Jefferson County, Northern Virginia, and Maryland, as well as the water quality of the Chesapeake Bay. Therefore, Rockwool should be required to obtain an individual permit. (47CSR10 Section 13.4.c.2.A. and 13.4.c.2.D)

It is easily ascertainable that the Rockwool Ranson facility is sited on karst geology.⁶ Despite this information being readily available, when originally permitting the Rockwool facility the Site Selection Criteria (West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.10) were not followed. “Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s), subsidence, or delineated wellhead protection areas, as determined by the Bureau of Public Health. If areas of karst, wetlands, fault(s), subsidence, delineated wellhead protection areas or other areas determined by the director to be vulnerable based on geologic or hydrogeologic information, are determined to exist, then the facility or activity design must adequately address the issues arising from locating in the area(s) of a potentially more vulnerable groundwater resource.” (See Exhibit D.) This facility should never have been permitted to be located on karst. And Rockwool clearly failed to describe the karst underlying its facility and its understanding of the risks associated with the presence of karst in its original 2017 stormwater construction permit application.

A karst landscape is characterized by the presence of sinkholes, springs, caves, ridges and sharp projections in the underlying bedrock, and highly irregular soil-rock interface. The karst landscape is a consequence of the presence of soluble bedrock, which consists of limestone in the case of Jefferson County. In such landscapes water percolates through the ground and dissolves the underlying rock creating a porous network of caverns and throughways. Karst aquifers are known to be “extremely vulnerable to pollution,” due to direct connection between the surface

⁶ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. Carbonates and evaporites. 2012 Jun 1;27(2):143-52.

Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. Field Guides. 2015 Sep 1;40:425-84.

Doctor DII, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In Sinkholes and the engineering and environmental impacts of karst 2008 (pp. 12-22).

and underlying high permeability aquifers.⁷ The groundwater at the Rockwool site is only 60 feet below the ground.⁸ However, at the locations of the water reuse pond and the stormwater pond, large amounts of earth have been removed, meaning the groundwater is even closer to the contents of the pond than 60 feet.⁹

The Rockwool site is on a karst feature known as an “Arabian plain.” This is an upland area with relatively few surface streams, seasonal variability in the water table that results in numerous estavelles, and large amounts of water in the epikarst. This water is easily contaminated and the springs at the margins of the Arabian plain are directly affected by the water quality throughout the aquifer (Exhibit E). It is known from several dye studies that this water flows and diffuses relatively quickly. This is significant as the majority of Jefferson County residents depend on wells for water. The exact number and location of wells in Jefferson County is unknown, because Jefferson County did not have a consistent record of wells until county ordinances were created in 1980. Many of the wells most vulnerable to contamination of any type are those wells built before 1980, which are shallower and have inconsistent construction that makes them prone to inflow. The water in the epikarst at the Rockwool site will affect the drinking water of a majority of Jefferson County residents.

In a dye test performed by the USGS in 1988 and 1989 it was found that the water from just adjacent to the Rockwool site emerged in the headwaters of both the Elk’s Run and Rattlesnake Run¹⁰ (Exhibit F). The Elk’s Run headwaters is a spring about three miles south east of the Rockwool site and goes on to become the drinking water source for Harpers Ferry and Bolivar before emptying into the Potomac River (Exhibit F). The headwaters of Rattlesnake Run is a spring about 3.5 miles from the Rockwool site and is also a tributary of the Potomac River. These are just two examples of the examples the dye test demonstrated, of how the groundwater at the site communicates with and affects the surface waters in the county.

The Rockwool facility is in the Rocky Marsh Run watershed, which is in the source water protection zone for Shepherdstown and drains to the Potomac River. In fact, Jefferson County has 25 watersheds that empty either directly into the Potomac or into the Shenandoah before it joins the Potomac River. **In this way, the surface waterways of Jefferson County have a direct effect on the Chesapeake Bay and as such are required to adhere to Chesapeake Bay watershed-wide federal requirements.**

Through both the groundwater aquifer and Rocky Marsh Run, the activities at the Rockwool facility have the potential to affect the drinking water of the great majority of Jefferson County

⁷ Gutiérrez F, Parise M, De Waele J, Jourde H. A review on natural and human-induced geohazards and impacts in karst. *Earth-Science Reviews*. 2014 Nov 1;138:61-88.

Ford D, Williams PD. *Karst hydrogeology and geomorphology*. John Wiley & Sons; 2013 May 3.

Zhou W, Beck BF. Engineering issues on karst. In *Karst management 2011* (pp. 9-45). Springer, Dordrecht.

⁸ Carpenter DL, Connelly DT, M Innis. Project Shuttle, Site Characterization Report VRP (Volunteer Remediation Plan) Parcel Jefferson Orchards Site. Environmental Resources Management. 2017 Sept.

⁹ *Id.*

¹⁰ Kozar MD, Hobba WA, Macy JA, *Geohydrology, water availability, and water quality of Jefferson County, West Virginia with emphasis on the carbonate area*, US GEOLOGICAL SURVEY, 1991

residents, but also through its effects on the tributaries of the Potomac River, the drinking water of Northern Virginia and Maryland, and the Chesapeake Bay.

For decades now policy makers have been using “Aquifer Vulnerability” measures, of which karst is very high, to set land use and water resource protection policy.¹¹ The guiding documents of the WVDEP recognize this. The introduction to the WVDEP document *Stormwater Management Design in Karst Areas* states, “it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations.”¹²

Further, Karst is known to have “severe ground instability problems”¹³. This makes the “aquifer vulnerability” in karst areas very high¹⁴. This also makes karst geology prone to sinkhole development. Sinkholes provide direct connection between the surface water and any contaminants it may contain and the groundwater.

The Rockwool site is located in the area with the largest sinkhole density in Jefferson County (Exhibit G).¹⁵ Furthermore, a study demonstrated that in this area, several factors increased the rate of sinkhole development and these included presence of surface water and development (see footnote 13). Again, the WVDEP guidance documents agree. The Chesapeake Bay karst stormwater guidance document¹⁶, which WVDEP cites in the *Stormwater Management Design in Karst Areas*¹², clearly states that detention and retention ponds are not recommended on karst. Quoting WVDEP’s own karst guidance: “attenuating surface runoff will increase the rate of sinkhole formation and potential groundwater contamination.” Therefore, just by virtue of disturbing the ground on the site and creating ponds as Rockwool is doing, Rockwool has a high potential to actually increase the rate of sinkhole development. In Rockwool’s own geotechnical investigation report prepared for Thrasher Engineering by Specialized Engineering, it states the following:

¹¹ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

¹² Appendix C: Stormwater Management in Karst Area, in *West Virginia Stormwater Management and Design Guidance Manual*, Center for Watershed Protection, Inc, 2012, Nov; C1-C4

¹³ Doerflinger N, Jeannin PY, Zwahlen F. Water vulnerability assessment in karst environments: a new method of defining protection areas using a multi-attribute approach and GIS tools (EPIK method). *Environmental Geology*. 1999 Dec 1;39(2):165-76.

¹⁴ Machiwal D, Jha MK, Singh VP, Mohan C. Assessment and mapping of groundwater vulnerability to pollution: Current status and challenges. *Earth-Science Reviews*. 2018 Oct 1;185:901-27.

¹⁵ Doctor DH, Doctor KZ. Spatial analysis of geologic and hydrologic features relating to sinkhole occurrence in Jefferson County, West Virginia. *Carbonates and evaporites*. 2012 Jun 1;27(2):143-52.

Doctor DH, Weary DJ, Brezinski DK, Orndorff RC, Spangler LE. Karst of the Mid-Atlantic region in Maryland, West Virginia, and Virginia. *Field Guides*. 2015 Sep 1;40:425-84.

Doctor DH, Weary DJ, Orndorff RC, Harlow, Jr GE, Kozar MD, Nelms DL. Bedrock structural controls on the occurrence of sinkholes and springs in the northern Great Valley karst, Virginia and West Virginia. In *Sinkholes and the engineering and environmental impacts of karst 2008* (pp. 12-22).

¹⁶ CSN Technical Bulletin no. 1, Stormwater design guidelines for karst terrain in the Chesapeake Bay watershed, version 2.0, 2009

“Some sinkholes failures can be induced by construction activities and are of significance because the sinkholes can directly affect the site being developed, either immediately or some years later. Construction activities that can trigger sinkholes include 1) diversion or impoundment of drainage or dewatering activities, 2) removal of overburden cover, 3) shock vibrations, such as blasting, and 4) increased loading.

Prediction of sinkhole location or occurrence is difficult, if not impossible, and there is always a significant degree of uncertainty associated with the occurrence of future sinkholes. Structures built within the area of influence of a sinkhole can also be affected by sinkhole collapse or subsidence.

By virtue of the underlying geologic formation, the Owner must acknowledge there is an inherent risk of potential ground subsidence or collapse associated with construction of structures in karst terrain. All sites in karst terrain have the potential for sinkhole formation. **Specialized Engineering can provide no warranties or guarantees regarding future sinkhole or subsidence conditions.**¹⁷

In direct contradiction of all of this guidance, Rockwool built several retention ponds, and multiple concentrating swales and ditches. Furthermore, according to site map 16B (exhibit H) Rockwool chose to build two retention ponds far larger than is recommended on karst and several swales in the most sinkhole-vulnerable location on their property.

As of September 2019, there were at least 17 sinkholes on Rockwool’s site as can be seen on the site map (Exhibit I). Sinkholes anywhere on Rockwool’s property pose a risk of groundwater contamination. As noted previously, a majority of the particulate matter from the steam stack is expected to fall within the bounds of the Rockwool property and be entrained in rainwater that may enter such sinkholes along with any other ground level contaminant that may be present.

Unfortunately however, most of the sinkholes have been inside of stormwater ponds, with seven sinkholes appearing in Rockwool’s rainwater reuse pond during construction (Exhibit I). This poses an alarming possibility. The rainwater reuse pond is the reservoir for all of the pollutants produced at Rockwool and this structure developed at least 7 sinkholes during construction alone. In light of this, one can easily see a scenario where a sinkhole develops in the rainwater reuse pond and leads to catastrophic contamination of the groundwater aquifer in Jefferson County. This would affect the drinking water of tens of thousands of people in Jefferson County, and through its direct effects on the surface waterways and the Potomac River the drinking water of Northern Virginia and Maryland and the Chesapeake Bay.

Rockwool’s proposed stormwater pond design is inadequate and inappropriate for karst terrain, especially at this critically sensitive location. Rockwool’s sinkhole mitigation procedure includes adding liners to the ponds. It is well known and studied that liners fail when voids like sinkholes

¹⁷ Project Shuttle -New Industrial Site at the former Jefferson Orchard Kearneysville, Jefferson County, West Virginia Specialized Engineering Project No. 177164, Specialized Engineering 4845 International Blvd, Suite 104 Frederick, MD 21703, July 11, 2017

open under them. In fact, there is a whole field of study into detecting sinkhole development, void development, and earth movement under such liners.

The pond liners Rockwool is using pose several issues. First, they have one layer of 60 mil HDPE liner. It is recommended to have two layers. Sixty mil is also the minimum thickness recommended in the Stormwater Pond Design Guidelines. Because the pond is so large (estimated 72,000 square feet) there will be 3,600 linear feet of on-site welded joints. These joints are the weakest part of the liner and the most likely to fail. Rockwool's HDPE membrane was field fabricated with thousands of feet of welds required to join the rolls of material together. The welds were made in the dirty unconditioned field and are sure to fail due to poor workmanship, cracks, and the unstable soil below. If a large sinkhole opens below the pond, there will likely be catastrophic failure at joints of this liner.

Under this liner, there is a quarter of an inch thick geosynthetic clay layer, and again, there are joints in this layer as well. This is the weakest part of this layer and most likely to fail. This layer is over a geogrid liner, which allows liquids to pass freely through it. Under this are four inches of compacted barrow clay, however the Chesapeake Stormwater Network Technical Bulletin recommends 24 inches of soil or clay. There is no leak detection system shown in the IEP, nor is there a detection system for sinkhole formation. Therefore, although the ponds have three layers of material, only one, the HDPE membrane is designed to prevent liquids to pass through.

The Fabricated Geomembrane Institute recommends a *Double Composite Liner System* where there is potential for groundwater contamination. That system consists of a Primary Geomembrane layer; Geosynthetic Clay Liner/Compacted Soil; Drainage/Witness Layer and a Secondary Geomembrane over Compacted Soil. The Double Composite Liner System provides the best approach to prevent leakage of contaminants from the ponds into the groundwater. No liner system can prevent the catastrophic failure of the system caused by sinkholes opening under the ponds.

A simple search of peer reviewed literature reveals a plethora of information highlighting the risks associated with development in karst geology and many techniques for studying the impact of development on such land. It does not appear as though the municipality of Ranson employed any of these methods when it incorporated or rezoned this area. However, this oversight or lack of due diligence by Ranson does not absolve the WVDEP of its responsibility and liability to protect the water resources. Such a search will also reveal many techniques and methods for designing best strategies for limiting risk in a karst area. It does not appear as though Rockwool employed any of these techniques or guidelines. It seem catastrophic failure of a liner and the contents of the basins escaping into the groundwater resource may be the only way that Rockwool will know a sinkhole has formed under one of its sediment basins.

3. Rockwool's methods are unlike other mineral wool facilities in West Virginia and thus require an individual permit to appropriately protect the waters of the state.

The current Multi-sector Stormwater Permit will not do enough to protect the groundwater and surface water resources of Jefferson County and the region. As you know, a general permit is an NPDES permit that covers multiple facilities that have similar discharges and are located in a

specific geographic area based on the permit writer's professional knowledge of those types of activities and discharges. Whereas, an individual permit is written to reflect site-specific conditions of a single discharger based on information submitted by that discharger in a permit application and is unique to that discharger.

Rockwool's method of manufacturing mineral wool insulation is unique and bears little resemblance to methods used by either Knauf or Armstrong, the other two mineral wool manufacturers in West Virginia. Knauf, located in Inwood, is only 10 km from Rockwool, but uses an entirely different technology (electric arc in a closed vessel, with little or no process water). The Armstrong facility in Millwood, on the Ohio River, is not only smaller (30,000-square-foot plant on 18 acres), but itself does not have a Multi-Sector General Permit for stormwater management—it was required by WVDEP to obtain an individual NPDES permit.

There are no other mineral wool facilities that have the same process-based or site location-based stormwater concerns as Rockwool. Rockwool is the only North American mineral wool manufacturer to attempt to build a facility on karst and it is using different processes than other mineral wool manufacturers. Rockwool is using an innovative method of rain harvesting to supplement its domestic water use. An individual NPDES permit is thus appropriate for Rockwool due to its location on karst and high potential for groundwater contamination.

Evaluation of current rain harvesting technologies reveals no other large commercial and industrial facilities that have rain harvesting at the scale that Rockwool proposes. Most significantly, all of the large rainwater harvesting examples have closed vessels and tanks, often in series, to store the captured rainwater/stormwater. There is also no other instance of rain harvesting where process-related wastewater flows into and mixes with the captured rainwater/stormwater. Rockwool's hybrid Water Storage & Reuse Pond is unique and has not been tried before, not even at their facility in Byhalia, Mississippi. Due to the first ever use of a Process Wastewater and Rainwater Harvesting system, Rockwool must not be allowed to proceed under a General Permit.

4. The Rockwool facility poses additional concerns and risk factors that can only be addressed adequately under an individual permit.

There are many concerns at the Rockwool facility that should and could be addressed if Rockwool were required to have an individual permit. These are also relevant factors in determining the risk to the waters of the state from Rockwool and therefore Rockwool should be required to obtain an individual permit. (47CSR10 Section 13.4.c.2.D)

4.1 Inappropriate Pond Design for Karst Geology

Rockwool's sinkhole mitigation procedure includes adding liners to the ponds. However, it is well known and studied that liners fail when voids like sinkholes open under them. In fact, there is a whole field of study into detecting sinkhole development, void development, and earth movement under such liners. In an effort to prevent disaster, Rockwool should be required to

install the latest technology in and beneath the liners for its stormwater pond.¹⁸ In fact, it seems a multimodal approach would be most appropriate here to detect sinkhole development and liner leakage.

In the Chesapeake Stormwater Network Technical Bulletin No. 1, a guiding document cited by the WVDEP, it gives the following general principles that should be considered in site layout and design of stormwater systems in karst.

1. Any existing sinkholes and karst swales should be surveyed and permanently recorded on the property deed or plat. In addition, an easement, buffer or reserve area should be identified on the development plat for the project so that all future landowners are aware of their presence.
2. Minimize site disturbance and changes to soil profile, including cuts, fills, excavation and drainage alteration, near karst features.
3. Sediment traps and basins should only be used as a last resort after all other erosion and sediment control options have been considered and rejected. In the rare instance they are employed they should serve small drainage areas (2 acres or less) and be located away from known karst features.
4. Designers should place a high priority on preserving as much of the length of natural karst swales present on the site to increase infiltration and accommodate flows from extreme storms
5. Treat runoff as sheet flow in a series of small runoff reduction practices before it becomes concentrated. Practices should be designed to disperse flows over the broadest area possible to avoid ponding, concentration or soil saturation.
6. The use of centralized stormwater practices with large drainage areas is strongly discouraged even when liners are used.
7. Centralized treatment practices require more costly geotechnical investigations and design features than smaller, shallower distributed LID practices.
8. Designers must address both the flooding and water quality aspects of post development stormwater runoff. In most localities, the sequence of stormwater practices should have the capacity to safely handle or bypass the 2- and 10- year design storm, following the methods outlined in Section 5.4.
9. Designers should maintain both the quality and quantity of runoff to predevelopment levels and minimize rerouting of stormwater from existing drainage.

None of the above principles were followed in the case of Rockwool. In an individual permit, these and all of the recommendations in the Chesapeake Stormwater Network Technical Bulletin No. 1 need to be followed.

¹⁸ Guan Z. Study on monitoring and early warning of karst collapse based on BOTDR technique. Jentsch H, Basedau F, Schwartz A, Witt KJ.

Detection of slipping soil areas with embedded tiny vertical sensing rods. In Proceedings of the 6th International Conference on SHM of Intelligent Infrastructure SHMII-6, Hong Kong. The Hong Kong Polytech. Univ., Book of Abstracts, S 2013 (Vol. 289).

Briançon L, Nancey A, Villard P. Development of Geodetect: a new warning system for the survey of reinforced earth constructions. *Studia Geotechnica et Mechanica*. 2005 Mar 1;27(1-2):21-32.

In the case of principle number 1 above, the Multi-Sector General Permit requires a topographic map be provided that extends at least a mile beyond Rockwool's property that shows the following: all intakes and discharge structures, sinkholes, drinking water wells, springs, and surface water bodies. Rockwool's topographic map and site map are deficient. There are several of these features within one mile that are not shown, including 8 known in-use drinking water wells, 12 total wells, sinkholes, and documented wetlands. Rockwool falsely claims there are no wetlands.⁸ Mountaineer Gas Company did an extensive karst inventory of sinkholes prior to installing the natural gas pipeline and those sinkholes are also not discussed or depicted on any maps in the IEP or the General Permit application. Outlet #1 and #2 discharge to a field in the northern area of Rockwool's property; it is unclear from the topographical map if there are sinkholes in this area. These deficiencies in the topographical and site maps must be corrected and accounted for in the design of the stormwater plan. Another deficiency that will need to be corrected is the inappropriate design and location of outlets. An example of such faulty location of outlets is that there appears to be a sinkhole close to the location of the level spreader for the stormwater outlet #1 and #2. If this is the case, discharge from outlet #1 and #2 may make this sinkhole worse and lead to groundwater contamination with surface water.

In table 3 of the Chesapeake Stormwater Network Technical Bulletin No. 1, it says that wet ponds are discouraged, need liners and may require a UIC. They go on to say, "use of wet ponds in karst terrain is highly restricted, because of frequent recurring failures due to sinkhole formation." It says, at a minimum, there must be six feet of unconsolidated soil material between the bottom of the basin and the top of the bedrock layer. The maximum temporary or permanent water elevations with basins do not exceed six feet. There must be inspections for sinkholes and they must be reported and addressed immediately. A liner must be installed that meets requirements they set forth in their Table 6 (Exhibit J).

A pond—even a lined one—is simply not appropriate for the rainwater reuse pond, as this pond holds stormwater admixed with process water and serves as a reservoir for pollution. The recommendations and warnings are clear from the guiding documents of the WVDEP to the warning from Specialized Engineering (the firm engaged by Thrasher Engineering to evaluate Rockwool's Ranson site) -- failure of a wet pond in karst—even an optimally lined one—is eventual. This would leave the groundwater and surface water, including the Potomac and Chesapeake, at great risk. Therefore, the contents of the rainwater reuse ponds should be stored in above ground closed vessels that are appropriate for the contents, and monitored appropriately for deterioration. The design of the stormwater ponds should be modified to be in accordance with the recommendations from the guiding documents of the WVDEP. Any ponds that are used should be lined and have a multimodal detection system for both leaks and sinkhole development. This can be addressed in an individual NPDES permit.

The WVDEP approved Rockwool's sinkhole mitigation procedure in 2018. First, the sinkhole mitigation procedure allows too much time to pass between the identification of a sinkhole and when it needs to be repaired – time that allows for possible drinking water contamination. The WVDEP should require reporting within hours of noting the sinkhole, and emergency intervention to happen within 24 hours. The WVDEP should directly oversee these repairs. Each

sinkhole should be evaluated to ensure the optimal remediation procedure is employed.¹⁹ There is no contingency for addressing any new sinkholes, which might open up, nor any discussion of inspecting swales, ditches, or ponds related to the stormwater management to check for new sinkholes. Rockwool has already been cited on September 9, 2018 with a notice of violation in six areas, including failure to report a sinkhole. There needs to be the guarantee of a significant fine for future non-compliance, especially regarding sinkholes. Again, it seems that the only way Rockwool will know they have a problem is when there is catastrophic failure. As mentioned previously, Rockwool should be required to have a multimodal detection system for sinkhole development.

The WVDEP director can and should require Rockwool to perform routine groundwater monitoring. It is unacceptable that Rockwool has not included this in its plans. With regard specifically to outside material storage and disposal areas, and impoundments, for industrial facilities, West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that “placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring,” and “groundwater monitoring stations may be necessary to assure protection of the groundwater resource.” Given the information cited previously about the sinkholes on site and our sensitive groundwater resources, WVDEP should require regular and frequent monitoring and reporting of groundwater. This can be required in an individual NPDES permit.

4.2 Buried Utilities

Rockwool failed to inventory and discuss its existing underground pipelines in the Multi-Sector General Permit application. Applicants are required to provide an inventory of all “operations, which may reasonably be expected to contaminate groundwater resources.”²⁰ The following potential sources are specifically listed: Outside materials storage areas, Disposal areas, Loading and unloading areas, Bulk storage and distribution areas, Drums, Sumps, Pumps, Tanks, Impoundments, Ditches, and Underground Pipelines. Rockwool specifically and falsely states that it has zero underground pipelines when, in fact, Rockwool has at least two underground pipelines, including a natural gas pipeline and a liquid oxygen pipeline.

Both the natural gas pipeline and the liquid oxygen pipeline run directly through the area for greatest risk of sinkhole development on the property (Exhibit K). The natural gas pipeline runs between the furnace side of the building and both the Sediment Pond and the Water Reuse Pond, within 10 feet of the stormwater discharge outlets. Rockwool’s liquid oxygen runs from the oxygen tanks that sit immediately south of the Stormwater Pond, under the perimeter road and on to the furnace building. This is not an inconsequential fact. As described previously, due to the

¹⁹ Zeng Y, Zhou W. Sinkhole remedial alternative analysis on karst lands. *Carbonates and Evaporites*. 2019 Mar 5;34(1):159-73.

Zhou W, Lei M. Conceptual site models for sinkhole formation and remediation. *Environmental earth sciences*. 2017 Dec 1;76(24):818.

Huckert A, Garcin P, Villard P, Briançon L, Auray G. Experimental and numerical approaches of the design of geotextile-reinforced embankments prone to sinkholes. In *10th International Conference on Geosynthetics 2014 Sep 21 (Vol. 21)*.

²⁰ West Virginia National Pollutant Discharge Elimination System Multi-Sector General Water Pollution Control Permit, Number WV0111457, issue date September 12, 2019, pg. 37

karst geology, these pipelines are at particular risk of damage leading to groundwater contamination or explosion and catastrophic damage. Underground oxygen piping is also particularly vulnerable to damage by lightning, which may ignite the pipe material.

Pipeline ruptures and explosions have occurred all too often as a result of the failure to monitor pipelines for corrosion or cracks. Rockwool has failed to identify any plans for pipeline monitoring. Such plans should be identified and included in any permit, and monitored by the WVDEP to ensure proper oversight and maintenance. The underground pipelines and their proximity to the stormwater ponds and conveyances, as well as monitoring for corrosion and pipeline integrity, should be addressed in an individual permit.

4.3 Other Facility Design, Control, and Operations Stormwater Management Concerns

The section of the IEP Facility Design, Control, and Operations, it states “storage of solid waste or recycled material is constructed with an appropriate concrete surface that is chemically resistant to waste or recycled material. Liquid is not stored in designated solid waste or recycled material areas and containers that are outside have cover lids. The collection system is connected to the process water system and does not discharge to the stormwater outfall.”²¹ The solid waste area needs to be lined, in addition to a ‘concrete surface that is chemically resistant.’ This will come into contact with liquid as it is uncovered and is the destination for dewatered sludge from other ponds. These areas have not been evaluated and must be addressed along with the storage of waste products, by-products, and materials destined to be recycled. It is possible that the Resource Conservation and Recovery Act (RCRA) should apply here. This issue needs to be specifically addressed, including an analysis of whether RCRA applies to these waste storage activities; and, if so, whether proper regulatory action has been taken. In addition, Rockwool states that they will generate a waste sludge consisting of spent sulfur dioxide-removal pollutant control chemicals. They say that this material will be stored in a silo and then shipped offsite. As such material is often caustic and may entrain toxic chemicals, it will need to be evaluated as a potential hazardous waste. At the very minimum, Rockwool must obtain a RCRA generator number and be in the state and federal RCRA tracking system.

WVDEP guidance for stormwater controls says it **requires** “the employment of mitigating practices to eliminate potential contaminants from reaching the stormwater structure.” Admixed process water and stormwater enter the settling pond, which is a concrete lined forebay to the rainwater for reuse pond, via a 48-inch pipe (exhibit C). The water remains in residence there for some period of time before flowing over a weir into the rainwater for reuse pond. During this residence time, some material settles out of the water. Over time, this builds up in this concrete lined pond. This material is periodically removed using heavy equipment. How will it be ensured that this material is not spilled outside of the concrete lined pond? Just to the south of this settling pond, there is a swale that leads to the stormwater outlet #1 (Exhibit L). If material from the pond is spilled here during clean out of the settling pond, then it will contaminate the stormwater outlet with process materials. This is inappropriate. There should be secondary containment to prevent process materials from entering stormwater in this location. Using closed

²¹ Rockwool IEP submitted with the General Multi-sector Application, section 5.2 Facility Design, Control, and Operations. 2019 pg22.

vessels for the admixed rainwater process water storage would also solve this. This could be addressed in an individual NPDES permit.

The water in the rainwater for reuse pond is drawn back into the process via a pump inlet and pump station (Exhibit M). How will leaks at this liner penetration point be prevented? This needs to be addressed.

The IEP describes how the rainwater reuse pond is sized for a 100-year rain event, and in the event that it is approaching capacity due to a large storm event, Rockwool can store and treat the water. "For example, RAN5 could employ water tank trucks to haul off water to be treated at a designated publicly owned treatment works [POTW]." It is unclear which POTW they are referring to. If it is Charles Town, this should have been described in the NPDES modification that was approved on March 1, 2019. Since it was not described, it should not be allowed by the Charles Town Utility Board (CTUB). This is too serious a risk to not be specifically addressed. Rockwool must amend its application to identify what is the trigger for the preparation for a "heavy rain event," where are the water tank trucks going to come from, if the trucks are contracted, how will Rockwool ensure that they are actually available when needed, how will it ensure that the drivers and operators of these water tank trucks are actually properly qualified to be handling contaminated water, and most importantly, where will these trucks dispose of the contaminated water? What location has agreed to take such water? This could be addressed in an individual NPDES permit.

Rockwool should be required to test the contents of each tanker truck before it is hauled away, to ensure no hazardous materials are mixed with rainwater, and that the trucks are not then contaminated for further water hauling. This should be further evaluated and well defined in the Rockwool permit application. This could be addressed in an individual NPDES permit.

In the most recent publicly available version of the internal plumbing plans of Rockwool (12-13-19) on sheet PA0201.2 there is a sump pit in building number 135 (Exhibit C 10). The label states "Pump piping up and out of pit. Flow has 2 options valve with pipe to outside for release outside or valve with hose connection for a local tote." In the letter to Mr. Hennessy dated December 13, 2019 by Daniel Ferrell, P.E. Principal in Charge of the Thrasher Group, Inc. the engineering firm of Rockwool referenced above, he states:

"For ease of construction, water from this sump will be tied into process water system. For clarification, there are no sumps connected into sewer system. Further clarification can be provided that as per the note indicated on PA021.2 that these sumps are monitored and controlled by plant operator. If the plant operator determines there will be no negative impact, the sump discharge will enter the storm system. This will only occur after the plant's operator evaluates the discharge."

Where does this discharge go when it is "released outside"? How does the operator evaluate the discharge? Is this an unpermitted discharge? This needs to be addressed and appropriate protocols developed for evaluating the discharge need to be put in place and an appropriate discharge location be determined and designated. This can be done in an individual permit.

4.4 Groundwater Protection Plan and Monitoring

A great majority of the households and agricultural businesses in the area surrounding the Rockwool Ranson facility depend on groundwater. If the groundwater were to be fouled, it would devastate Jefferson County and surrounding regions' equine and agricultural industry, and therefore, our economy. It would saddle our local government with restoration cost and legal cost as citizens seek restitution. It would be a major burden to households who will be forced to find alternate, undoubtedly more expensive, sources of water. We have repeatedly seen this play out across our state as the consequences of previous industrial and extractive activity manifested. Here, we have the chance to prevent such devastatingly negative consequences. We are counting on the WVDEP to protect the groundwater we depend on in Jefferson County.

The Multi-Sector application, section 19, requires a Groundwater Protection Plan (GPP), either standalone or in combination with a Stormwater Pollution Prevention Plan, and each must be certified. As provided its IEP, Rockwool's description of groundwater data is woefully incomplete and demonstrates a cursory analysis of what is truly a foundational concern. The WVDEP guidelines for successful Groundwater Protection Plan list the groundwater analysis, data, and other related information that should be included. While Rockwool mentions it exists, it barely addresses it. As described in West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4.11, "Each industrial establishment shall have a comprehensive groundwater protection plan (GPP). Each GPP shall contain the following:" Among many elements, the following is listed: "A discussion of all available information reasonably available to the facility/activity regarding existing groundwater quality at, or which may be affected by the site." Previous groundwater data and monitoring are easily available from extensive USGS and county research, yet Rockwool doesn't describe them. Rockwool also fails to describe the geophysical testing done in 2017.¹⁷ The narrative references groundwater data that are included in a table in the appendix, but the appendix section is incorrectly titled, the table has no descriptive text, and does not even label the units of measurement, rendering it useless.

As cited in the sinkhole section previously, there are published studies that are applicable to the Rockwool site and sinkholes. A USGS study used dye tracer tests to determine rates and directions of groundwater flow within the karst aquifer. Dye was injected into a sinkhole in Shenandoah Junction, about a mile from Jefferson Orchards. Two weeks later, the same dye was detected at a monitoring point north of Shepherdstown. Within 20 weeks, it was detected at an additional 5 sites between Kearneysville and Shepherdstown. The study reported movement of up to 840 feet per day – which indicates that contamination can happen quickly. This sort of information is in fact "reasonably available to the facility" and should have been included and considered, and would be able to be in the context of an individual permit.

The director of the WVDEP can and should require Rockwool perform routine groundwater monitoring. West Virginia Legislative Code §47-58, Groundwater Protection Regulations, Section 4, states that groundwater monitoring stations may be necessary to determine if contamination is occurring or has occurred, and also to "assure protection of the groundwater resource." In section 4.9.c. it goes on to say, "new facilities shall monitor groundwater upon order of the director if the director reasonably believes that an industrial establishment or activity has the potential to contaminate groundwater." Page 69 of the WVDEP stormwater management guidance document states, "monitoring wells and groundwater sampling may be required by the

director for the assessment of the potential for or existence of groundwater contamination.” It is reasonable to believe Rockwool has the potential to contaminate groundwater, and monitoring for groundwater contamination should absolutely be required in Jefferson County. Given what we know about the sinkholes on site and our sensitive groundwater resources, and knowing that at least 70% of the people in this county drink well water, the WVDEP should require frequent monitoring and reporting of groundwater. This should be addressed with an individual NPDES permit.

4.5 Inappropriate Description of Pond and Site Runoff Design

Rockwool states, “the outfall discharges water onto an outlet apron during discharge to maintain non-erosive discharge velocities.” The outfall apron needs to be better described and monitoring parameters with action trigger points need to be defined to prevent erosion and sinkhole formation. This could be addressed in an individual NPDES permit.

4.6 Rockwool’s IEP Fails to Identify All Outdoor Process Activities

Rockwool’s air permit (R14-0037) describes a “melting furnace portable crusher” as an outdoor process. This process is a significant source of dust and fugitive particulate matter, third only to the two steam stacks. This process is planned at least quarterly. BACT limits imposed on the crusher are limited to operational time limits (540 hours/year). The EPA pointed out that this was inadequate for BACT on this process, in its comments on the air permit⁴. The air permit describes this process as occurring in a dedicated area that is uncovered, B170. Therefore, B170 is also a materials processing area in addition to a storage area for process-related industrial pollutants as described in a previous section. Again, this area is uncovered, unlined, and about 20 feet from the Water Reuse Pond and Bioretention Basin #2. This outdoor process should be considered in an individual NPDES permit.

4.7 IEP Fails to Address the Potential for Dust and Particulate Contamination of Stormwater Discharges

Rockwool will produce fugitive dust and particulates that may contain formaldehyde, menthol, phenol, silane coupling agents, and other hazardous substances. Several processes generate fugitive dust, including the portable crusher operation mentioned in the previous section. This process is entirely uncontained and uncontrolled by any pollution control devices. In addition, Rockwool’s controlled processes will produce up to 134 annual tons of PM_{2.5} and 154 annual tons of PM₁₀. Air modeling suggests that the bulk of the dust and particulates will fall out within Rockwool’s drainage and be deposited on building roofs, asphalt surfaces, parking lots, roads, and vegetation. The stormwater, which falls on these surfaces, will capture the dust and hazardous particulates contained within and convey them to the stormwater and bioretention ponds and outlets. As a consequence of the toxic nature of the underlying contaminants, these captured contaminants have the potential to negatively impact groundwater and surface water. The effect on water resources has not been evaluated and needs to be addressed. This could be addressed in an individual NPDES permit

4.8 Internal Plumbing Plans Should Be Included in the Application

The IEP shows that the Stormwater Management Pond that drains areas HrC and HeB, which covers parts of the manufacturing facility, discharges to a field north of Rockwool through Outlet #1. This Outlet #1 is expected to have discharge of 86,330 gallons per day. Is all this water in

fact stormwater? Further, in section 4.4.7 of the IEP, it states, “no interior building floor drain is designed for connection to the storm drain system.” However, we know from evaluating the plumbing plans that the process water admixes with stormwater and enter the rainwater for reuse pond.

It appears from site plan sheet 000-015 that process water from some of the buildings enters the storm drain system that enters the stormwater pond that discharges to outlet #1 and the natural environment. The WVDEP must require that the application contain the internal plumbing plans, to determine that no process water from the facility is expected to be discharged into ponds with a discharge to the natural environment. These issues could be addressed with an individual NPDES permit.

4.9 Storage of Unknown Chemical in Close Proximity to Water Resources

Seven of the 13 Aboveground Storage Tanks (AST) on site have undisclosed contents and hold 88,500 gallons of unknown chemicals. If the contents of the ASTs are unknown, there is no way to determine if the ASTs are in compliance with 47 CSR 63 (AST Design Construction and Installation), or if proper and adequate containment is provided. It is impossible to evaluate the application for adequate groundwater protection water resources absent this information. Further, it is reckless to allow unknown industrial chemicals this near stormwater ponds, sinkholes, and water supply protection zones on karst geology.

Additionally, there is no information provided about Rockwool’s plans to monitor and ensure tank integrity. The risk of corrosion, leaks, and vapor releases from storage tanks has resulted in multiple disasters in this country. Rockwool’s permit application must include its plans for tank integrity inspection.

If there were a spill, the public utility leaders would need to know the contents immediately. This information needs to be on file so an appropriate plan can be made before it is an emergency situation. Disclosure of the contents of these ASTs is imperative, required by statute, and should be part of the permit. This could be addressed in an individual NPDES permit.

4.10 Substantial Harm Determination

The Rockwool facility is located such that any toxic release to groundwater or surface water from the facility would shut down at least one public water supply and should therefore be classified with a Substantial Harm Determination. Harpers Ferry sources their drinking water from Elk Run, Jefferson Utilities Inc. from the aquifer, and Shepherdstown from Rocky Marsh Run. Additionally, there are thousands of households, businesses, and farms that source their drinking water for humans and animals from private wells in the aquifer. As discussed in the karst section of this document, the aquifer is contiguous over a long area of the county and the flow rate of the aquifer is rapid. A Substantial Harm Determination would require some relevant safeguards be in place. This could be addressed in an individual NPDES permit.

4.11 Waste Material Usage

Rockwool states, “no wastes or waste materials are used for deicing, fills, or any other uses on site unless provided for in an existing rule.” The “existing rule” needs to be further defined so that it can be determined what material is being used for what. Rockwool plans to use waste

material back into the furnace. As described in “Section G. Waste Material” of the ground water protection plan this use needs to be allowed either by regulation or permit. What regulation or permit covers this activity? Similar to as stated previously, this issue needs to be specifically addressed, including an analysis of whether RCRA applies to these waste usage activities; and, if so, whether proper regulatory action has been taken. The effect of this waste treatment, storage, and use on the water resources needs to be addressed.

Conclusion

This Petition is not an exhaustive list of the issues that need to be addressed in an individual NPDES permit for the Rockwool Ranson facility. The public simply does not have all of the information, such as the complete up-to-date plumbing plans, to present an exhaustive list of the basis for an individual permit. However, what is obvious is that due to the inappropriate siting and unique process of rainwater harvesting and process water recycling, that the processes at the Rockwool Ranson facility will not be adequately addressed under the General Multi-sector Stormwater Permit. Further, it is clear that Rockwool produces significant amounts of pollution and poses a risk to waters of the state. Therefore, Rockwool should be required to apply for and obtain an individual NPDES permit.

The Jefferson County Foundation respectfully requests that the Department consider the information provided within this submission on Rockwool’s Multi-Sector Industrial Stormwater Permit Application No. WVG611896, and formally respond to this Petition filed pursuant to 47 CSR 10 Section 13.6.b.2.A and require Rockwool to obtain a valid individual permit. Granting this petition will ensure that appropriate protections and oversight can be applied by the WVDEP to address all of the unique concerns the Rockwool facility poses to Jefferson County.

We believe that the information here and available to the DEP in its assessment of the petition, will prove that this is exactly the type of situation contemplated by the rule, to ensure that – whereas here – that a facility poses unique challenges, it deserves unique consideration. As we explained above:

- Rockwool is a significant contributor of pollution and as such should be required to obtain an individual permit.
- Rockwool’s facility is being located in a hydrogeologic setting with vulnerable groundwater resources, which can only be protected via the careful and tailored use of protective measures able to be imposed via an individual permit.
- Rockwool plans novel methods that are unlike those used in other mineral wool facilities in West Virginia and thus an individual permit is needed to appropriately protect the waters of the state.
- We presented 11 other specific concerns, which have been identified that require an individual permit to be adequately addressed.

Based on all the above information, Jefferson County Foundation petitions you, Mr. Caperton, to require that Rockwool apply for and obtain an individual NPDES permit for its Ranson facility. Please contact me for any further information that you believe would be helpful in evaluating the petition.

Regards,



Dr. Christine L. Wimer
President, Jefferson County Foundation, Inc.

Stacey Pfaltzgraff

From: Heidi Zimmerman <heidiz4@me.com>
Sent: Thursday, June 18, 2020 10:32 AM
To: spfaltzgraff@ransonwv.us; dpierson@ransonwv.us; gtaylor@ransonwv.us; scoulter@frontiernet.net; tgrant@ransonwv.us; astroud@ransonwv.us; andersonant5@aol.com; donhainessr@gmail.com
Subject: Written Public Comment for hearing on #2017-302

Dear Ms. Pfaltzgraff:

Re: #2017-302: "AN ORDINANCE AMENDING AND RE-ENACTING THE OFFICIAL ZONING MAP OF THE CITY OF RANSON PURSUANT TO RANSON MUNICIPAL CODE § 19-20 AND CHAPTER 19A, ARTICLE 1: 'JEFFERSON ORCHARDS' REALLOCATING TRANSECT DISTRICTS (DISTRICT 8, TAX MAP 12, PARCEL 1)"

Please vote no on ordinance #2017-302. This Ordinance would allow industry in Ranson that is not aligned with the comprehensive plan of the City. The Comprehensive Plan of Ranson under General Land Use Objectives states the following:

"10. Encourage manufacturing and assembly-line facilities to locate in Ranson. The City will designate ample land that well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community."

The City has failed to address the latter part of this objective. By changing the Special District Industrial (SDI) in the way that the City did in 2017, this designation enables industry that will endanger the health, safety, or welfare of the community. By now changing this additional land from new community to SDI, Ranson has ensured that such industry will come to fruition.

The industry that this rezoning will provide for produces significant amounts of pollution. The air pollution would include gaseous emissions, particulate matter and hazardous air pollutants. These substances are known to cause diseases affecting multiple organ systems including the neurologic, immunologic, respiratory, cardiovascular, endocrine, blood and skin. These effects are strongest during gestation and childhood as development is exquisitely sensitive during these times, but the effects are realized throughout life negatively impacting a variety of lifetime parameters including physical and mental health and economics. Many of these effects have recently been shown to occur even below the World Health Organization standards. This rezoning will undeniably endanger the health of the community.

Through a combination of its visibility in the county and the pollution it produces this industry will harm the industries that are the pillars of our economy. The air pollution endangers the health and performance of the horses in the thoroughbred racing industry ultimately decreasing return on investment, cash flow, and overall earnings for owners, breeders, and trainers. This group provides over \$70 million in direct business volume per year in Jefferson County. The agriculture industry will experience decreased crop yield due to the air pollution and will also see decreasing return on investment, cash flow, and overall earnings. The industry new would be an eyesore visible from many locations in the county, the haze will affect visibility and view, and both will have a negative effect on perceived sustainability to tourism. These effects will cause decreased visitors and again decrease return on investment, cash flow, and overall earnings for the hundreds of small businesses that make up the tourism industry. In these ways, the presence of the industry this zoning change will allow will have a substantial negative effect on the economy of Ranson and the County, and will undeniably endanger the welfare of the community.

The hydrogeology at the location is completely inappropriate for the type of industry this rezoning will allow. Due to the mature karst hydrogeology at the location, there is a high level of aquifer vulnerability. Pollution that has fallen to or is

present on the ground, will be carried by surface water into the groundwater aquifer via diffuse and point infiltration. Even the engineering company hired by Thrasher engineering for Rockwool warned that it was impossible to eliminate the risk of sinkhole development and groundwater contamination. This is precisely why the guiding documents of the DEP recommend strong zoning and land-use regulations from local government to prevent development of karst areas. Because of the characteristics of the karst aquifer in this location, contamination of the groundwater here would affect the drinking water of the great majority of Jefferson County. This rezoning will undeniably endanger the safety of the community.

The Comprehensive Plan as quoted above states, "the City will designate ample land that is well-suited for industrial facilities." Due to the hydrogeology, this land is not well-suited for industrial facilities as would be allowed by the Special District Industrial. Respectfully, Mr. Stranko is incorrect in his assertion that the council is not allowed to take the environment into consideration in zoning decisions, as it is the purview of the DEP. In fact, the DEP implores local governments to do just that in its guiding documents on stormwater design in karst. The DEP Stormwater Management Design in Karst Areas states, "it is important to note that the potential for geological hazards, damage to infrastructure, and groundwater contamination is an ongoing concern when developing in these areas. And that best approach is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations." Clearly, the DEP is encouraging local governments to use zoning to steer development like this away from karst land. This karst area is inappropriate and ill-suited for this use and it should not be zoned for it.

The Comprehensive Plan is clear: the city has a duty to ensure that new industry will "not adversely affect the health, safety, or welfare of the community." This zoning change would clearly adversely affect the health, safety, and welfare of the community. The Comprehensive Plan further states, "the City will designate ample land that is well-suited for industrial facilities." This land is clearly ill-suited for industrial use and should not be zoned for it. Therefore, the council should vote no on the zoning change. Please vote no on the ordinance #2017-302.

Sincerely,

--
 Heidi Zimmerman
 heidiz4@me.com
 Charles Town 25414

Stacey Pfaltzgraff

From: Richelle Bartosevich <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 1:51 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

A Comprehensive Plan aids in designing and recommending to the governing body ordinances that result in preserving and enhancing the unique quality of life and culture in that community (Comp plan, pg. 4).

Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Richelle Bartosevich
richelle726@yahoo.com
727 Gap View Blvd
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Kathryn Bellacosa <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 11:18 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Kathryn Bellacosa
kbella21@gmail.com
321 Calmes St
Charles Town, West Virginia 25414-5439

Stacey Pfaltzgraff

From: Windsong Bergman <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:30 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

As a Jefferson County resident, born and raised in Jefferson County, I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Windsong Bergman
bergmanwindsong@yahoo.com
5864 Scrabble Rd.
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Cynthia Feeser <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 10:03 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

How did a federally funded plan to build a sustainable community devolve so quickly into a heavy industrial facility permitted to be the second-largest emitter of VOCs in the state of WV?

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

I'm concerned about our air and water. Why aren't you?

Thank you for your consideration.

Cynthia Feeser
cjfeeser@gmail.com
5567 Engle Molers rd
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: jgeigel@live.com <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 3:54 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Ranson, WV is located in Jefferson County, which is known to have a flourishing local agriculture, equine and tourism community. Four nearby schools are within three miles of Jefferson Orchards. The reallocation to expand the industrial zone, inherently increasing pollution, can deteriorate air, land and water quality, diminishing the quality of life for residents.

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Jacqueline Geigel

jgeigel@live.com

160 Staley Drive

Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: William Gillette <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:58 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

William Gillette
wkgille@gmail.com
47 jasmine pl
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Melissa Hackett <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:48 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Attachment: 20200623 - Written Comments - Packet #13 (1685 : Ordinance #2017-302)

Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Melissa Hackett
melissahackett@gmail.com
342 Bullskin st
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Jennifer Haley <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 2:34 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Jennifer Haley
haleyjen2@gmail.com
102 Owl Avenue
Martinsburg, West Virginia 25405

Stacey Pfaltzgraff

From: Brandt Heisey <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 11:44 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

As a person who has close friends down wind of this proposal, it concerns me greatly about the consequences to their health and quality of life. Additionally, as a frequent visitor to Ranson this construction would make me reconsider visiting again.

Thank you for your consideration.

Brandt Heisey
brandt.heisey@gmx.com
5781 Westchester Street
Alexandria, Virginia 22310

Stacey Pfaltzgraff

From: Catherine Jozwik <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:50 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

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Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Catherine Jozwik
jozwikc@gmail.com
47 jasmine pl
harpers ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Steven Keser <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 12:19 PM
To: Stacey Pfaltzgraff
Subject: Absolutely No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

The fact that this is even a consideration is troubling. Just a stones throw from the Appalachian Trail and historic Harpers Ferry, any yes vote on this would be the end of Wild Wonderful West Virginia in our area. If you care about jobs, tourism, and the continued beauty of this county and the surrounding area you will vote no on this.

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Steven Keser
stevenkeser@gmail.com
71 Muirfield Ct
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: George Laney <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:54 PM
To: Stacey Pfaltzgraff
Subject: Please vote NO on Special District Industrial for Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

Please vote NO on Special District Industrial for Jefferson Orchards. As a neighbor; former resident of Charles Town; and Registered Nurse (recently at Martinsburg V.A. Medical Center for 10 years) I implore you to vote NO. You owe no allegiance to Rockwool—only to your constituents. Surely, it has become evident that the overwhelming majority of Ranson residents as well as Jefferson County and Eastern Panhandle neighbors (with no vested interest in Rockwool or other heavy industry) OPPOSE INDUSTRIALIZATION of Jefferson County. Please honor the wishes of your constituents that has been voiced repeatedly over the past two years+ in huge public turnouts for related hearings and meetings in Ranson; Charles Town; and Shepherdstown.

Thank you for your consideration.

George Laney
GeorgeLaney@frontier.com
53 Dill Weed Drive
Falling Waters, West Virginia 25419

Stacey Pfaltzgraff

From: Joan Latham <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:45 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Joan Latham
lathamjoan@yahoo.co
531 Hughs Road
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Richard Latham <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:48 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Thank you for your consideration.

Richard Latham
lathamjoan@yahoo.com
531 Hughs Road
Charles Town , West Virginia 25414

Stacey Pfaltzgraff

From: Ronda Lehman <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 3:14 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

PLEASE READ THIS ENTIRE LETTER.

It is not a form letter and contains valuable information to concerning your decision to change the zoning of Jefferson Orchards.

I am writing as a county resident to oppose the zoning change making Jefferson Orchards an "Industrial zone."

We do not currently burn coal in Jefferson County. Therefore, burning 82 tons of coal a day for an industrial process will change the quality of air in this county forever.

Burning that much coal raises concerns for the fly ash, and coal by-products which will need disposal.

I must remind you that we live in the karst in Jefferson County. This means that we have large areas of limestone in the ground. Limestone, when it meets rainwater, dissolves over time creating sinkholes. We have many sinkholes and caves in Jefferson County.

Dye tests were done in the 70's and 80's that revealed dye placed in a stream in Middleway, would come up in the Shenandoah River a day later. We have an Obsidian Plateau in Middleway where the water disappears under the ground. All the streams on one side run and drain into the Shenandoah River. This was discovered when a wood processing plant wanted to locate in our first "industrial park" in Rippon. That plan was scrapped due to the potential stream and aquifer contamination that would've occurred in Jefferson County. Our Health

Department should have the results of that testing. The sanitarian at the time was Mr. Cooper who was known to keep meticulous records.

Sinkholes allow the water on the surface to quickly fall through the holes into the aquifer. The aquifer is our source for drinking water. The sinkholes in this county communicate with one another, meaning our drinking water is all connected. A dairy farm in Berkeley County can pollute the Shenandoah River in Harpers Ferry, due to the water communication in our aquifers.

Rockwool has already been fined by the WV DEP for not reporting 17 sinkholes found on their site. With the "holding ponds" on the site large rain events will allow easy contamination of the aquifer under the plant, and almost all of the drinking water found in the valley of Jefferson County. This transmission will also slowly pollute aquifers down stream through the number of caves and sinkholes that exist throughout our county.

My residence in Harpers Ferry lies directly in the path of the prevailing winds on a normal day. This means those 82 tons of coal and their by products will find their way to my house on an almost daily basis.

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

The future health of this county's water, and her residents is in your hands. Your actions will not just effect Ranson, it has the potential to pollute all of our aquifers in Jefferson County. We have had many battles with our state to keep frack waste from the Landfill in Berkeley County for the same reasons. So far we have been successful, which has kept our aquifers pristine. Allowing Rockwool to operate on top of all those sinkholes will negate all of the work that has been done for decades in this county to protect our drinking water.

Your vote could turn Jefferson County into a drinking water desert. Unable to sustain the residents here without increasing their chances for cancer, lung issues, low birth rates and neurological defects. When water is slowly poisoned by industry you see it in children and the elderly first. Is 150 jobs worth that sacrifice?

I urge you to vote "NO" on the zoning change for Jefferson Orchards.

I thank you for your service to our county and understand the pressures from all angles in these decisions. This decision comes down to 150 jobs, or the health of all future generations of Jefferson County.

I thank you for your consideration of my letter.

Ronda Lehman of Harpers Ferry, WV.

Ronda Lehman

teencourtjcwv@gmail.com

334 River Rock Run, Jefferson County Teen Court

Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Elisabeth Longmire <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 1:48 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Thank you for your consideration.

Elisabeth Longmire
liz.longmire@gmail.com
P.O. Box 1185
Shepherdstown, West Virginia 25443

Stacey Pfaltzgraff

From: Christine Marshall <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 11:11 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Christine Marshall
balmertmarshall@icloud.com
409 Oakwood Drive
Shepherdstown , West Virginia 25443

Stacey Pfaltzgraff

From: Lily Martin <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 1:28 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Lily Martin

Lily.jb.martin@gmail.com

364 Barrel Horse Dr

Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Doris McGillick <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 11:25 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Thank you for your consideration.

Doris McGillick
mcgillickd@gmail.com
42 Ferrell Alley
Shenandoah junction , West Virginia 25442

Stacey Pfaltzgraff

From: Anne Meador <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 11:38 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

I'm a Maryland resident, just on the other side of the river from Shepherdstown. I moved here just two years ago. I fell in love with the area because of the friendly people, its unique culture, and most of all, its exquisite natural beauty.

After living in the DC metropolitan area for many years, I've come to appreciate clean air. You don't know what a precious thing you have if you have clean air to breathe. When I came from the city, I had a noticeable feeling of relief being able to fill my lungs easily.

Don't give in to uneducated, anti-science beliefs that amount to "if I can't see it, it's not there." Polluting emissions have real, predictable effects on human and animal health and plant life.

The potential for catastrophic polluting spills into the groundwater is also a risk that will be ignored at our peril.

You have a second chance to do right by all the residents of this area--and that includes those of us in Maryland and Virginia whose lives, livelihoods and quality of life depend on Jefferson County remaining non-industrial.

Attachment: 20200623 - Written Comments - Packet #13 (1685 : Ordinance #2017-302)

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Anne Meador
annemm13@gmail.com
6115 River Rd
Sharpsburg, Maryland 21782

Stacey Pfaltzgraff

From: Scott Patterson <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 3:57 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

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Thank you for your consideration.

Scott Patterson
scottp999@comcast.net
382 Chickamauga Drive
Harpers Ferry, West Virginia 25425

Stacey Pfaltzgraff

From: Emma Prillaman <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 11:40 AM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

As a native of Jefferson County, with my family still living and farming the land there, I am already heartbroken at the loss of trust and good faith with the local organizations that brought Rockwool to our home, despite the fact that so many citizens oppose having heavy industry in their backyard.

To me, Jefferson County's greatness lies in its beauty, eco-tourism, healthy environment, and agricultural traditions.

Allowing even more heavy industry in Ranson would be the total destruction of what so many of your citizens and neighbors hold dear about our home - please please do not do this.

You have the opportunity now to truly listen and to implement the will of the people. Please do not vote to allow further polluting industries into this county.

Emma Prillaman
emmap304@gmail.com
27 S JEFFERSON ST, FL 1
Frederick, Maryland 21701

Stacey Pfaltzgraff

From: Mary Ross <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 1:28 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

I implore you to think of our children that will be spending so much of their twelve plus years attending schools under the cloud of this industrialization and what affect this rezoning will have on them. Also think and consider the years of work that many of our county's family farmers have put into their work to become certified as being organic, that will not be able to keep that privilege under this cloud of industrialization due to the rezoning of Jefferson Orchards.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

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Singling out the Jefferson Orchards parcel for an Industrial District use classification different and inconsistent with the surrounding area, for the benefit of a particular owner and a detriment to neighbors and the surrounding community, does not promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, as well as efficiency and economy in the process of development.

Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Mary Ross
paigntonct@frontiernet.net
1853 Flowing Springs Rd
Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Maura Ross <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:33 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

While General Land Use action item 10, "encourages manufacturing and assembly-line facilities to locate in Ranson," it further states, the City will designate ample land that is well-suited for industrial facilities and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. (Comp plan, pg. 31)

You are vacating your additional duties under the Comprehensive Plan. A specific purpose of a comprehensive plan is to: (4) Create conditions favorable to health, safety, mobility, transportation, prosperity, civic activities, recreational, educational, cultural opportunities and historic resources (Comp plan, pg. 5).

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Thank you for your consideration.

Maura Ross

Maura Ross

maura.ross27@gmail.com

1853 Flowing Springs Road

Charles Town, West Virginia 25414

Stacey Pfaltzgraff

From: Anthony Russo <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 2:45 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

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Ordinance #2017-302, and the resulting zoning classification change permitting industrial use, clearly violates provisions in the 2012 Comprehensive Plan. The 2012 Ranson Comprehensive Plan provides a framework for all zoning and planning actions taken by Ranson and should be followed.

Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Anthony Russo
trussowv@gmail.com
6568 Flowing Springs Rd.
Shenandoah Junction , West Virginia 25442

Stacey Pfaltzgraff

From: Rod Snyder <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 4:07 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

I am writing to urge you to stand against the Special District Industrial reallocation, amending the Jefferson Orchards site on the official Zoning Map.

As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Please reject Ordinance #2017-302 to amend the zoning map of the City of Ranson, vote NO on heavy industry in Jefferson County and protect the remaining land in compliance with the Comprehensive Plan.

Thank you for your consideration.

Sincerely,

Rod Snyder

Rod Snyder

rodsnyderwv@gmail.com

116 Wildwood

Shenandoah Junction, West Virginia 25442

Stacey Pfaltzgraff

From: Stephen Stahley <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 1:46 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

Dear Mayor Pierson and Ranson City Council Members,

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As a Ranson City Council member, your first responsibility is to the citizens of Ranson, and I believe the passing of Ordinance #2017-302 prioritizes the needs of Rockwool over the general welfare of the residents.

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Thank you for your consideration.

Stephen Stahley
stephenstahley@hotmail.com
400 N. Forrest Street
Ranson, West Virginia 25438

Stacey Pfaltzgraff

From: Nicholas Tabb <info@sg.actionnetwork.org>
Sent: Thursday, June 18, 2020 3:54 PM
To: Stacey Pfaltzgraff
Subject: No on Amending Special District Industrial at Jefferson Orchards

CAUTION: External Email

Stacey Pfaltzgraff,

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Thank you for your consideration.

Nicholas Tabb
nicholas.tabb@pngaming.com
248 Willowdale Dr
Shepherdstown, West Virginia 25443