

**WEST VIRGINIA ENVIRONMENTAL QUALITY BOARD
CHARLESTON, WEST VIRGINIA**

JEFFERSON COUNTY FOUNDATION, INC., et al.,

Appellants,

v.

Appeal No. 20-02-EQB

**KATHY EMERY, DIRECTOR
DIVISION OF WATER AND WASTE MANAGEMENT,
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION,**

Appellee,

and

ROXUL USA, Inc., d/b/a ROCKWOOL,

Intervenor.

**APPELLANTS' PROPOSED FINAL ORDER, FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

The Appellants, by counsel, Christopher P. Stroeck, Esq., do hereby submit the following proposed Final Order, Findings of Fact and Conclusions of Law. Following the evidentiary hearing held on December 10-11, 2020 and March 18-19, 2021, these proposed findings and conclusions are based upon and cited to the testimony, all admitted exhibits, and the complete Certified Record. Appellants offer the following:

FINAL ORDER

On March 26, 2020, the Appellants, the Jefferson County Foundation, Inc., Dr. Christine Wimer, Karen Michelle Freer, and Calvin Perry, timely filed the above-referenced appeal of the decision by the West Virginia Department of Environmental Protection (“WVDEP,” “Agency” or “Appellee”) to approve the issuance of General Permit Registration No. WVR108876 to Roxul USA, Inc. d/b/a Rockwool ("Rockwool"), to operate under General Permit No.

WV115924 (the "2019 Permit") to discharge stormwater associated with construction activities pursuant to the federal and state National Pollutant Discharge Elimination System ("NPDES") program on February 25, 2020. On April 7, 2020, Rockwool was admitted as an Intervenor in this case.

A four-day evidentiary hearing was held before a court reporter and a quorum of the Environmental Quality Board ("EQB" or "the Board") on December 10 and 11, 2020 and March 18 and 19, 2021. Christopher P. Stroeck, Esq., represented the Appellants. Charles S. Driver, Esq., represented the WVDEP. Joseph V. Schaeffer, Esq., and James A. Walls, Esq. represented Rockwool.

The Board heard testimony from eleven witnesses during the hearing. Expert witnesses included Dr. Christopher Groves for the Appellants and Dr. Timothy Bechtel for Rockwool. Other witnesses included WVDEP employees Director Katheryn D. Emery, Assistant Director Yogesh Patel, Permit Reviewers Rick Adams and Andrew Parsons, Supervisor and Reviewer Larry Board, Inspectors Tommy George and Travis Hayes, and Deputy Secretary for External Affairs Scott G. Mandirola. Rockwool also called Peter Regenber, Vice President of U.S. Operations, as its corporate designee.

Appellants and Intervenor admitted numerous trial exhibits as listed in the hearing transcript. The WVDEP provided the Certified Record. Edward Snyder, Ph.D., Chairman of the Board, presided over the hearing, with the following other members in attendance: Charles Somerville, Vice-Chairman, Marilyn Winters, and Stephen Capelli.¹ The hearing was conducted in accordance with the October 29, 2020 Procedures for Remote Hearings (by Zoom and telephone) issued by the Board for hearings conducted during the COVID-19 pandemic. After

¹ Regrettably, during the pendency of this matter, Board Member William Gillespie passed away and was not present at the evidentiary hearing. However, a quorum of the Board was maintained throughout.

the hearing, the parties each submitted proposed findings of fact and conclusions of law and responses thereto.

All proposed findings of fact and conclusions of law have been considered and reviewed in relation to the adjudicatory record developed in this matter. All arguments of counsel and applicable law have been considered and reviewed in relation to the record. To the extent that the proposed findings of fact and conclusions of law are in accordance with this Final Order, they are adopted in their entirety; to the extent that the proposed findings of and fact and conclusions of law are inconsistent therewith, they are rejected. Certain proposed findings of fact and conclusions of law have been omitted as not relevant or necessary to a proper decision. To the extent that the testimony of witnesses is not in accord with this Final Order, it is not credited.

Based upon the proposed findings of fact and conclusions of law, the complete record and applicable law, the Board has voted unanimously to **VACATE** the subject Registration and remand the matter to the WVDEP staff for appropriate consideration of the issues described herein below.

I. Standard of Review

Pursuant to W.Va. Code § 22B-1-7, the Appellants timely appealed the WVDEP's issuance of the Registration to Rockwool under the 2019 Permit. Section 22B-1-7 requires the Board's Order to be accompanied by findings of fact and conclusions of law as specified by the State Administrative Procedures Act, W.Va. Code § 29A-5-3.

W.Va. Code § 29A-5-4(g) sets forth the standard of judicial review for contested cases, noting in relevant part that the court "shall reverse, vacate or modify the order or decision of the

agency if the substantial rights of the petitioner or petitioners have been prejudiced because the administrative findings, inferences, conclusions, decision or order are:

- (1) "In violation of constitutional or statutory provisions; or
- (2) In excess of the statutory authority or jurisdiction of the agency; or
- (3) Made upon unlawful procedures; or
- (4) Affected by other error of law; or
- (5) Clearly wrong in view of the reliable, probative and substantial evidence on the whole record; or
- (6) Arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion."²

The Board hears appeals of permits issued by the Appellee WVDEP *de novo* and does not afford deference to the Director's decision. Fola Coal Company, L.L.C., Appellant, v. Lisa A. McClung, Dir., Division of Water and Waste Management, W.Va. Department of Env'tl. Protection, Appellee, EQB Order, Appeal No. 08-22-EQB (Dec. 10, 2009), citing W.Va. Division of Env'tl. Protection v. Kingwood Coal Co., 200 W. Va. 734, 745, 490 S.E.2d 823, 834 (1997) (Under W.Va. Code § 22B-1-7(g), the Board “shall make and enter a written order affirming, modifying or vacating the order, permit or official action of the chief or secretary, or shall make and enter such order as the chief or secretary should have entered.”)

In deciding this case, the Board applies a burden shifting analysis in analyzing the evidence presented, first determining whether the Appellants have proven with sufficient

² The Supreme Court of Appeals has recognized this standard of review. Texas Eastern Transmission v. W.Va. Dept. of Env'tl. Protection, et al, 240 W.Va. 131 (2017). The Board will therefore apply this standard of review in deciding this appeal since the Board plays a judicial role in this instance and its decision is subject to formal judicial review under this standard.

evidence that the Director's decision was incorrect, and if so, did the Appellee produce evidence that its decision was sound, or did the Appellants prove that the explanation was pre-text.³

II. Discussion

The DEP approved Rockwool's application for Registration under the 2019 permit, even though it had not provided a Karst Mitigation Plan ("KMP") to the WVDEP as required by the terms and conditions of the 2019 permit and did not consider karst mitigation pursuant to the applicable Legislative Rules. Based on all evidence presented, the Board cannot conclude that the WVDEP had a sound basis for its decision to issue the Registration to Rockwool.

The WVDEP has not defined what should be included in a KMP, leading to inconsistency across permit reviews. The only guidelines presented on karst mitigation -- the Karst Mitigation Plan Template ("KMP Template") and the Chesapeake Bay Bulletin (the "Bulletin") -- clearly state that karst mitigation includes more than just a responsive sinkhole repair plan.

Finally, Appellants have produced sufficient evidence that the WVDEP should have required public notice and comment on Rockwool's first Registration application in 2017,

³ As previously held by the Board,

To prevail in the appeal, the Appellants must raise an issue with sufficient evidence to support a finding that the Appellee's decision was incorrect. If sufficient evidence supported such a finding, then the Appellee would have to produce evidence demonstrating why its decision was sound, regardless of the Appellants' evidence. The Appellants have an opportunity to show that the evidence produced by the Appellee is pre-textual or otherwise deficient. This shifting burden of proof standard was set out in a case before the Circuit Court of Kanawha County, Wetzel County Solid Waste Authority v. Chief Office of Waste Management, Division of Environmental Protection, Civil Action Number 95-AA-3 (Circuit Court of Kanawha County, 1999). The Kanawha County Circuit Court once again approved the use of the Wetzel County burden-shifting rule in environmental appeals in Sierra Club v. Benedict, Civil Action Number 07-AA-42, Slip Op. at 6 (Kanawha County Circuit Ct. June 29, 2007).

The Board recognizes that while the Wetzel County case is merely persuasive authority, the Board agrees with the analysis and has used it regularly in considering cases before it.

consistent with the terms of the 2012 Permit. Appellee did not provide a sound basis for its failure to do so, other than the blanket acceptance of Rockwool's representations, despite substantial evidence to the contrary. This failure deprived the Appellants and general public from commenting on the inadequate karst mitigation until after construction began.

It is undisputed that the Rockwool facility is located on a well-developed karst landscape and aquifer. As confirmed by the expert for both parties, building on karst presents significant risks to the groundwater, including sinkhole development and groundwater contamination.

Legislative Rule § 47-58-4.10 requires that where industrial facilities are sited in vulnerable karst hydrogeology, "the facility or activity design must adequately address the issues from locating in the area(s) of a potentially more vulnerable groundwater resource." There is no evidence that the WVDEP did anything to verify that Rockwool took this required action or if any action taken was adequate. In fact, all WVDEP witnesses testified that karst mitigation did not have to be considered under the 2012 Permit, and was not considered despite this clear Legislative Rule.

In further recognition of the significance of protecting the groundwater from the risks of contamination in karst, and pursuant to Section II.I.2.c of the 2019 Permit, Rockwool was to provide a Groundwater Protection Plan ("GPP") containing a KMP.⁴ However, after careful consideration of all the evidence, the Board has determined that Rockwool did not provide a sufficient KMP, and that the WVDEP's acceptance of a sinkhole repair plan as a substitute for a KMP did not meet the terms of the 2019 Permit. The WVDEP did not provide evidence to the

⁴ Rockwool's position that it was not required to submit a KMP under the 2019 Permit, as it was only seeking a reissuance of its registration under the 2012 Permit, is not supported by the Permit, applicable federal and state law and the pattern and practice of the WVDEP.

contrary; and as such, it acted arbitrarily and inconsistently and without due regard to the information squarely before it.

As this Board has held, “[t]he [agency] does have a duty to act in a manner that is not arbitrary and capricious. Decisions based upon information that is extremely flawed are arbitrary.” Timberline Utilities, Inc., Appellant v. Chief, Office of Water Resources Division of Env’tl. Protection (Mar. 26, 1999). Further to that point, “[a]s a general rule, an administrative agency action is deemed to be “arbitrary” if it is taken without a sound basis in reason and generally without regard to the facts.” Wade Painter v. David Ballard, Warden, 237 W.Va. 502 (Sup. Ct of Appeals 2016).

It is highly instructive how the U.S. Supreme Court has interpreted the term “arbitrary and capricious” under the federal equivalent of the State Administrative Procedures Act. According to the Supreme Court, a court must evaluate whether the agency “considered the relevant factors and articulated a rational connection between the facts found and the choice made.” Baltimore Gas & Elec. Co. v. NRDC, 462 U.S. 87, 105 (1983) (citing Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc., 419 U.S. 281 (1974) at 285–86). An agency must “examine the relevant data and articulate a satisfactory explanation for its action.” Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). The Supreme Court also advises that courts should overturn agency action where the agency has “entirely failed to consider an important aspect of the problem, [or] offered an explanation for its decision that runs counter to the evidence before the agency.” Id.

Here, the WVDEP provided no evidence on why a responsive sinkhole repair plan constituted a sufficient KMP, or what actions it did take to ensure Rockwool took adequate mitigation measures for construction in karst. The WVDEP failed to consider the core aspect of

the problem presented by the facts at hand, which is how to address the risks to groundwater posed by construction activity occurring in a vulnerable karst-rich site. Instead, Appellee took a band-aid approach, requiring a sinkhole repair plan only after sinkholes appeared. There was no sound basis for the WVDEP's decision to grant the Registration in the absence of a required, and critically important, KMP.

In addition, during the hearing, the Appellee abandoned the KMP Template that it had provided to other permittees on what constitutes an adequate KMP. No explanation was offered for this curious step, which deleted the only standards that seemed to exist. The WVDEP further disregard the Bulletin, the leading resource on karst mitigation as confirmed by Dr. Bechtel -- expert witness for Rockwool. And regardless, in order to effect such a change in position and past practice, an agency must justify its departure from its own prior precedent by providing a "reasoned analysis." Ramaprakash v. FAA, 346 F.3d 1121, 1124–25 (D.C. Cir. 2003). *See also* Friedman v. Sebelius, 686 F.3d 813, 828 (D.C. Cir. 2012) (agency decision arbitrary and capricious because "it failed to explain its departure from the agency's own precedents"). That in turn "necessarily requires the agency to acknowledge and provide an adequate explanation for its departure from established precedent." *See* Dillmon v. Nat'l Transp. Safety Bd., 588 F.3d 1085, 1089–90 (D.C. Cir. 2009).

The WVDEP's explanation for disavowing the KMP Template and Bulletin are pre-text or without merit. The Appellee did not provide an adequate explanation for its actions in removing the KMP Template from the Electronic Submission System ("ESS") mid-way through the hearing. This is particularly odd because the WVDEP's responses to public comments indicated that a KMP template would be provided on the website. The KMP Template had been posted and used by other permittees and permit reviewers for over a year. The Appellee did not

argue that its contents were inappropriate or wrong, or otherwise provide any other reasoned basis for ignoring such guidance.

The Appellee also acted inconsistently when implementing the KMP requirement. It required some permittees constructing on karst sites to have and use KMPs consistent with the guidance documents posted on its website. With respect to Rockwool however, the permit reviewer insisted that such guidance was not applicable and only required a responsive sinkhole repair plan. The Appellee never articulated a reasonable basis for that action. It is clear from the testimony that the WVDEP has not defined what should be included in a sufficient KMP, offered no training or guidance to its permit reviewers on karst mitigation, and failed to ensure consistency of its permit reviews on what karst mitigation requirements are.

The KMP Template was created by Larry Board, supervisor of permit reviewers, reviewed with his peers and other permit reviewers, posted on the WVDEP website, and offered to applicants for guidance on preparing KMPs. The Bulletin was posted on the WVDEP website as the primary guidance document, used by permit reviewers, cited to by Rockwool's personnel, and referenced as a leading authority on karst mitigation by Dr. Bechtel, expert witness for Rockwool. Both the KMP Template and Bulletin require an applicant to consider not only sinkhole repair, but many other factors important for karst mitigation, including but not limited to adequate site investigations, facility siting, use of basins and the avoidance of large-scale infiltration. Rockwool did not consider any of these factors as part of its 2108 Sinkhole Repair Plan, developed only after sinkholes had developed at the site.

The evidence produced by Appellants further demonstrated, and the Appellees did not rebut, that Rockwool failed to adequately protect the groundwater during its construction phase. Rockwool did not conduct adequate site investigations for the purpose of karst mitigation.

Rockwool did not follow the KMP Template. Rockwool had unlined ponds for well over one year during construction. In fact, Rockwool employed many measures that are prohibited or discouraged by the Bulletin, including the use of basins and large-scale infiltration.

Finally, the WVDEP's review of Rockwool's initial 2017 Registration was arbitrary and capricious, clearly wrong, and in violation of applicable law, in that it failed to determine that Rockwool's limits of disturbance ("LOD") exceeded 100 acres and grading timeframe would exceed one year. The public was therefore deprived of the opportunity to comment on the inadequate karst mitigation before construction began.

Based upon a full review of the evidence, the Board finds that Appellants provided substantial evidence that the WVDEP did not comply with the statutory and regulatory requirements in considering Rockwool's 2019 Registration application and failed to act in accordance with those requirements to ensure the protection of the groundwater during construction in vulnerable karst hydrogeology. The failure to do so is arbitrary and capricious in multiple ways as noted above.

The Board further finds that the WVDEP's failure to provide clear guidance on what a sufficient KMP should contain, along with giving unfettered discretion to individual permit reviewers who have widely varied experience or qualifications in karst mitigation, has caused a lack of consistency in the review and administration of construction permits in karst areas across the state.

For all these reasons, the Board hereby **VACATES** the Registration issued to Rockwool, and remands back to the WVDEP, with the instructions to require Rockwool to hire an independent engineering and design firm ("IEDF") to review the status of the current site against engineering best practices for construction in karst, and to make such recommendations for any

modifications as are necessary to protect the groundwaters of Jefferson County.⁵ The Board further remands this matter back to the WVDEP to create clear and consistent guidelines as to what should be included in a KMP, using the Karst Mitigation Template and Bulletin as best guidance. The Board retains jurisdiction in this matter to review the findings and recommendations of the IEDF and will thereafter make further ruling as are necessary and proper.

III. Findings of Fact

Construction Stormwater General Permit History

1. The 2012 Construction Stormwater General Permit (the "2012 Permit") was issued on December 5, 2012. [Intervenor Rockwool ("INT") Ex.15-00001, CR P726-749]
2. The 2012 Permit went into effect on January 4, 2013. (INT Ex.15-00001, CR P726-749)
3. The 2012 Permit was originally set to expire on January 3, 2018. (INT Ex.15-0001, CR P726-749)
4. The 2012 Permit was administratively extended until March 31, 2019. (CR P2268)
5. The 2012 Permit was replaced by the 2019 Construction Stormwater General Permit on February 9, 2019. (APP Ex.8-0199⁶)
6. The 2019 Construction Stormwater General Permit (the "2019 Permit") was issued on January 10, 2019. (APP Ex.8-0199)
7. The 2019 Permit went into effect on February 9, 2019 and is currently in effect. (APP Ex.8-0199)
8. The WVDEP submitted the draft modified construction stormwater general permit to the EPA for its review on August 12, 2019. On October 31, 2019, the EPA objected to the issuance of the draft modified stormwater general permit because "portions of it that do not meet the requirements of the Clean Water Act, 33 U.S.C. §§ 1251 et seq. ("CWA") and its implementing regulations." (APP Ex.136-3621)

⁵ Appellants urge this Board to make a ruling that Rockwool failed to adequately protect the groundwater during its construction phase for the reasons set forth herein, notwithstanding what, if any, remedial measures are ordered by the Board at this time. The Board should do this to set a clear precedent.

⁶ Appellants Exhibits are numbered using 'JCF TE _____' in the bottom right corner of each document, and this number is cited to accordingly herein.

9. The EPA commented that in January 2019, the 2012 Permit was replaced by the reissued 2019 Permit, which had an effective date of February 9, 2019. As of February 9, 2019, coverage under the 2012 Permit was no longer available and the terms and conditions of that permit ceased to exist. Permittees were not allowed to maintain coverage under the expired 2012 Permit. (APP Ex.136-3622)
10. Rockwool is currently registered under the 2019 Permit. (APP Ex.14-0332)

Rockwool's Permit Registration Application History

11. Rockwool first initiated an application for a new NPDES Construction Stormwater General Permit Registration on July 31, 2017. The application was signed under oath by Kenneth Cammarato, Vice President and General Counsel for Rockwool. (CR P750)
12. Rockwool paid its application fees, and its Registration application was deemed administratively complete on October 11, 2017. (CR P750)
13. Rick Adams was assigned as the permit reviewer. (CR P750-751)
14. Applications for permits are processed via the Electronic Submission System ("ESS").⁷
15. Rockwool's first Registration was issued on October 19, 2017 under the 2012 Permit. (CR P750, INT Ex.08-00001-3)
16. Rockwool started grading at the site on November 1, 2017. (CR P2189)
17. Ten months later, by email dated September 17, 2018, Rick Adams advised Rockwool's Vice President Kenneth Cammarato that Rockwool needed to apply for a reissuance if it planned to grade beyond one year, and that if it failed to do so it may "have to stop operation until this process is complete." (CR P2191)
18. On September 27, 2018, Mette Drejstel, agent for Rockwool, advised Rick Adams that Rockwool planned to apply for reissuance by the end of that week. (CR P2190)
19. Rockwool applied for reissuance on September 28, 2018. (CR P38, P43)
20. On September 11, 2018, the DEP discovered sinkholes on Rockwool's property, and that Rockwool was "actively mitigating" the sinkholes. (APP Ex.28-1484, 1490; CR P2123-2128)

⁷ The ESS is the on-line interactive application form used by applicants and WVDEP permit reviewers to provide the necessary information required from the applicants. Permit reviewers can request changes or additional information through the ESS by putting "comments" into the Comment Section of the ESS application. These comments are memorialized in this section and are referred to here.

21. On October 2, 2018, the WVDEP sent a letter to Rockwool requesting that Rockwool submit a sinkhole mitigation plan and reminding Rockwool of its duty to notify the Agency when a sinkhole developed. (CR P1982)
22. On October 10, 2018, Rick Adams emailed Rockwool consultant James Hemme, of ERM, a copy of an example of another company's Sinkhole Maintenance, Inspection and Repair Plan. (CR P2211-2212) This repair plan had cross sectional diagrams and did not allow flowable fill to be placed in the throat of the sinkhole. (CR P 2211-2213, from 2-23-2020, attachment.)
23. On October 18, 2018, James Hemme sent to Rick Adams Rockwool's Rockwool RAN-5 Project: Supplemental Sinkhole Repair Procedure. (CR 2220-2223)
24. Rockwool withdrew its application for reissuance under the 2012 Permit on October 31, 2018. (CR P725). It did not provide any explanation for why it withdrew its reissuance application, and the WVDEP did not ask. (APP Ex.83-64-65, 67-68, 71)
25. The 2019 Permit states "All projects approved under the 2012 Permit's Site Registration Application or Notice of Intent with an approval date prior to February 9, 2018 must submit the Notice of Termination if all disturbed areas are permanently stabilized. All other projects that have not been stabilized shall submit an application for continuing coverage within 90 days of the effective date of this General Permit." (APP Ex.8-0201)
26. Rockwool had a termination inspection on May 8, 2019, and the termination was denied because grading was continuing. (CR P2162)
27. Rockwool submitted its application for registration under the 2019 Permit on June 21, 2019. (CR P1348)
28. At the time of application in June of 2019, Rockwool was still grading, had not started lining the ponds, had not finished storm drain installation, and had not started building buildings. (CR P1596, APP Ex.36-1524-1526, Ex.37-1527-1528, Ex.38-1529-1532)
29. Corrections were requested by the DEP on the application for registration on July 19, 2019 and September 13, 2019. These corrections included: change the designation to "Yes" for grading longer than one year, thus triggering public notice and comment; "attach the approved Supplemental Sinkhole Repair Document per the SWPPP" and to the revise construction sequence. (CR P1348, CR P1980-1981) Corrections were submitted by Rockwool on July 29 and September 16, 2019. (CR P1348)
30. The draft permit Registration for Rockwool under the 2019 Permit was prepared and approved by Rick Adams on September 18, 2019. (CR P1348)
31. The public hearing on Rockwool's application Registration under the 2019 Permit was held on October 23, 2019. (CR P1348). Over 205 members of the public appeared at the meeting and 47 gave public comment. 573 comments were submitted during the public comment period. Additionally, over 443 people signed on to a single set of comments. (CR P1985-1986)

32. On January 21, 2020, further corrections were requested by the WVDEP. This included but was not limited to the following:

Under Section 12-14 Relative Time Line, Sediment Controls, and Sequence the comments included:

"3. Revise the combined Storm Water pollution Plan and Ground Water Protection Plan: - Comply with all the terms and conditions of the 2019 Construction Stormwater GP issued 1-10-2019
-The GPP shall be a stand-alone document and shall be submitted with the registration as such, rather than as a component of the SWPPP.
-Revise 6.0 Inspection and Maintenance Procedures with the correct WV/NPDES General Water Pollution Permit No. WV01115924
-II.I.2b. Requires the Karst Mitigation Plan (Structure sinkhole Repair document as stated on Pg. 8 of SWPPP) is required to be part of the GPP.
-Revise 4.2 Existing Groundwater Quality with the correct receiving stream
-Include a description of all sediment and stormwater control structures. Provide design details including trapping capacities, spillway capacities, spillway configurations and inspection requirements."

Under Section 15-16 Site Maps, Discharge Area Maps, Storm Water Management comments included:

"16. Since the grading phase of construction has lasted longer than one (1) year you must update the progress map. The map shall contain the following:
-limits of disturbance depicting disturbed areas, undisturbed areas and stabilized areas;
-*Comply with all terms and conditions of the 2019 Construction Stormwater GP issued 1-10-2019*
-Sediment control structures and post-development stormwater management structures including all ditches, conveyances, drainage areas and drainage patterns depicting the stormwater discharge points;
-Location of rain gauge.
-Update sinkhole identification. Identify all sinkholes (Repaired and unrepaired).
-Additional information that necessary to describe the project in detail."
(CR P1348) (emphasis added)

33. On January 27, 2020, corrections were submitted by Rockwool. (CR P1348)
34. On February 25, 2020, Director Emory responded to the public comments; but did not provide accurate or complete responses to many of the questions and comments raised by members of the public. (CR P1346). For example, although the Director acknowledged that there were public comments and concerns "on how the project's construction could affect water quality, sinkhole collapse, unknown karst features, damage to water supplies...etc.", the response did not provide any substantive response and relied on documents that are non-existent. The response claims that the staff "met with Roxul representatives, assembled drainage information, and sought to further our karst knowledge." (APP Ex.15-0338)

35. On February 25, 2020, Rockwool's Registration under the 2019 Permit was approved. (CR P1348)

Rockwool was Required to Comply with all Terms of the 2019 Permit

36. The 2019 Permit is divided into four parts: Part I Introduction, Part II Pre-Construction Requirements, Part III Requirements During Construction, Part IV Requirements After Construction. (APP Ex.8-0202)
37. The 2019 Permit states: "This is to certify that any establishment with discharges composed entirely of stormwater associated with construction activities disturbing one acre or greater of land area which may be regulated under the terms and conditions of this general permit, has satisfied the registration requirements, and which has not been required by the Director of the Division of Water and Waste Management to apply for an individual permit, is hereby eligible to allow stormwater discharges into the surface waters of the State under this General WV/NPDES Water Pollution Control Permit. Authorization to discharge under this permit must be provided by the Director." (APP Ex.8-0199)
38. The 2019 Permit does not state that an entity may apply for coverage under only one part of the permit based on stage of construction. No evidence was offered that this practice has ever been done. (APP Ex.8-0199-0244)
39. The 2019 Permit states: "Existing registrations under the Notice of Intent approved from February 9, 2018 through February 9, 2019 *shall* submit the Notice of Termination if all disturbed lands are permanently stabilized. If construction is not complete and all disturbed lands are not permanently stabilized, such projects may retain permit coverage through the expiration date of this General Permit by submittal of the certification described above within 90 days of the effective date of this reissued General Permit." (APP Ex.8-0200) (emphasis added)
40. Rockwool was registered prior to February 9, 2018. (CR P750, INT Ex.8.00001-3), and thus is not eligible to "certify" under the 2019 Permit. (APP Ex.8-0200-0201)
41. The 2019 Permit also states: "All projects approved under the 2012 permit's Site Registration Application or Notice of Intent with an approval date prior to February 9, 2018 must submit the Notice of Termination if all disturbed areas are permanently stabilized. All other projects that have not been stabilized *shall* submit an application for continuing coverage within 90 days of the effective date of this General Permit." (APP Ex.8-0201) (emphasis added)
42. Rockwool was required to submit, and did submit, an application for coverage under the 2019 Permit. (CR P75; App Ex.8-0201)
43. WVDEP Director Emery testified that she was unaware of any exceptions for filing a KMP as required by the 2019 Permit. (Hearing Transcript Day 1 "T1", Pg. 189)

44. In the February 25, 2020 Responsiveness Summary for Reissuance #2, the DEP states that “the Reissuance has been revised to comply with all terms and conditions of the 2019 Construction GP issued 1-10-2019.” (APP Ex.15-0341.
45. In the 2017 SWPPP under Section 4.2 “Existing Groundwater Quality” it states that “Jefferson County is within a prevalent karst area.” (App Ex.8-0564.)
46. Rick Adams confirmed that all applications for projects in Jefferson County require a KMP. (T1, Pg. 206).
47. Larry Board, Supervisor of Rick Adams, testified that he did require a KMP for Fairfax Crossing, a housing development located in Jefferson County, although that application, like Rockwool's, was seeking a reissuance under the 2019 Permit. (INT Ex.49, Pgs. 127-128)
48. The DEP required other permittees who were replying for reissuance to conduct geo-technical studies and provide KMPs despite the fact that these permittees, like Rockwool, had already started construction and been previously registered under the 2012 General Permit. (INT Ex.50-00002-00003, INT Ex.49E-00002.)

Rockwool Sits on a Well-Developed Karst Aquifer with Potential for Sinkhole Development and Groundwater Contamination

49. Dr. Chris Groves, expert witness for Appellants, was certified as an expert professional geologist with an emphasis on karst landscapes and aquifers and reached all his opinions to a reasonable degree of scientific certainty. (T1, Pgs. 54, 123)
50. Dr. Groves testified, and it is un rebutted, that Rockwool sits on well-developed karst aquifer with potential for sinkhole development and structural collapse, that the site "is very highly vulnerable to contamination," and that the consequences of a contaminant release would include both human impacts and ecological impacts. (T1, Pgs. 68-69, 113)
51. Dr. Groves testified that if there was contaminate release from the Rockwool site, it is impossible to know where the release will flow as the radial flow pattern from the site could impact the Potomac River, Shenandoah River, Opequon Creek, and groundwater in these same areas. The best method that can be used to determine the likely endpoints for contamination is dye tracing. (T1, Pgs. 90, 101-103)
52. Dr. Groves reviewed Rockwool's groundwater protection plans and opined that both Rockwool's and the WVDEP's review of the same as related to karst was *cursory*. (T1, Pgs. 110-112) (emphasis added)
53. Dr. Groves testified that a sufficient hydrogeologic investigation of the Rockwool site has not been performed. (T1, Pg. 120)

54. Dr. Groves further testified that the four groundwater monitoring wells installed by Rockwool, and approved by the WVDEP, will not adequately monitor the karst groundwater system for leaks or contaminants due to the varying conduit flow patterns for the site. (Hearing Transcript Day 4 "T4", Pgs. 66-80)
55. Dr. Timothy Bechtel, expert witness for Rockwool, had no issues with the opinions of Dr. Groves. (INT Ex.51-00012) As such, they remain unrebutted.

The WVDEP has not Defined What Should be Included in a KMP and Offers No Guidance to its Permits Reviewers, thus Creating Inconsistency Among Permit Reviews in Karst Areas

56. WVDEP Director Emery testified, and it remains undisputed, that the 2019 Permit "does not reference any specific rules or regulations," that she was unaware of any rules or regulations that would provide guidance as to what should be included in an appropriate KMP (T1, Pg. 184), and that the 2019 Permit does not define a KMP. (T1, Pgs. 198-199)
57. Andrew Parsons, permit reviewer, agreed that 'KMP' has not been defined. (INT Ex.50-00010)
58. Scott Mandirola, Deputy Cabinet Secretary for the WVDEP, testified that he was unaware of any guidance that the WVDEP provides to applicants as to what should be included in a KMP. (T3, Pg. 53)
59. WVDEP Director Emery confirmed that a template or guidance document is reference material for the public to use when developing information for applications. (T1, Pg. 185)
60. Rick Adams agreed that templates and guidance documents, as found on the WVDEP website, help permittees determine what to submit in their applications. (T1, Pgs. 206-207)
61. Deputy Mandirola agreed that templates are guidance documents for the public to determine what needs to go into their applications. [Hearing Transcript Day 3 ("T3"), Pg. 42]
62. Deputy Mandirola confirmed that if a form is uploaded to the ESS, it would have to be approved. (T3, Pg. 48)
63. The Guideline Documents were not only used by the permit reviewers, but also shared by a geologist in the Groundwater Protection Program of the DWWM with other entities outside of the WVDEP. (CR P2272)
64. The KMP Template was incorporated word for word from the template that was published on the DEP website (APP Ex.93) to the ESS system as GPP: Section J. (APP Ex.137)

65. Following the first two days of the evidentiary hearing in December 2020, Section (a) and (b) were removed from ESS Section J: GPP Section J. [App Ex.93] The removed Sections stated:
- (a) "The preliminary and detailed site investigation(s) shall be completed as noted in the latest version of the Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed". This should be considered the minimum requirement in applicable to all karst areas in West Virginia.
- (b) "All necessary site investigations, as noted in the above-referenced Bulletin shall be completed by a qualified professional engineer or geologist, licensed by the State of West Virginia and experienced working in Karst Terrain.
- After the removal, the only remaining section left was section (c) regarding sinkhole mitigation. (*Compare* APP Ex.137 to Ex.138)
66. Rick Adams testified that that the KMP Template (APP Ex.93) is a template for preparing a Groundwater Protection Plan and help guide applicants as to what needs to be in the application. [Hearing Transcript Day 2 ("T2"), Pgs. 75-76]
67. Yogesh Patel, Assistant Director for the WVDEP's Division of Water and Waste Management, testified that he had never seen the KMP Template (APP Ex.93) before the hearing. (T2, Pgs. 161-162)
68. In the Response to Public Comment on the 2019 Permit, signed by Acting Director Emery on January 10, 2019, the DEP committed to provide a template (*See* APP Ex.93) when it stated: "DEP RESPONSE 43: A form on which to submit the elements of the GPP will be provided on the Electronic Submission System application for coverage under this general permit." (App Ex.97-2767)
69. Larry Board testified that he created the KMP Template (APP Ex.93) for use as a template for a groundwater protection plan. (INT Ex.49, Pgs. 45-46) He did this because he was "getting a lot of phone calls from permittees and consultants wanting to know if we had any type of guidance document that they could refer to and that they could use and we did not." (INT Ex.49, Pg. 47) He stated that he sent the draft template to Rick Adams, Andy Parsons and Jackie Peterson and the "feedback from everybody was it looked good." (INT Ex.49, Pg. 49)
70. Larry Board modified the KMP Template (APP Ex.93) and referenced the Bulletin as a "good plan" for karst mitigation. (INT Ex.49, Pg. 57) In fact, he was unable to identify any other resource for karst mitigation. (INT Ex.49, Pgs. 57-58). He further requested that both the KMP Template and Bulletin be uploaded to the WVDEP website. (CR P2395) These documents were indeed posted on the WVDEP website and made available to the public. (INT Ex.49B-00001)

71. Larry Board testified that the karst mitigation techniques as set forth in the KMP Template and Bulletin are "suggestions." (INT Ex.49, Pg. 62)
72. However, Andrew Parsons, permit reviewer, testified that he uses the documents on the DEP website (the KMP Template and Bulletin) to help evaluate karst mitigation. (INT Ex.50-00005, 00010) He clearly stated that if an applicant has any questions about the required plans, he has directed them to the WVDEP website. (INT Ex.50-00006) Indeed, Mr. Parsons has directly referred applicants to the KMP Template that was posted on the WVDEP website. (Ex.50-00014)
73. Rick Adams testified that the templates and guidance documents, as found on the WVDEP website, would comport with the applicable regulations and General Permit requirements, with only "slight differences." (T1, Pg. 207)
74. Rick Adams testified that the Bulletin, which he had reviewed prior to reviewing Rockwool's 2019 Registration application, "goes over the cautions that needs to be employed when constructing it -- inside the Chesapeake Bay watershed especially in karst terrain." (T1, Pg. 209) However, he further testified that he did not use the Bulletin directly as part of his review of Rockwool's 2019 application. (T1, Pg. 222)
75. Andrew Parsons testified that he considers the Bulletin as guideline for an applicant to use in preparing its KMP. (INT Ex.50-00006) Mr. Parsons could not identify other resources for evaluating karst mitigation (Id.)
76. Dr. Tim Bechtel, *expert witness for Rockwool*, testified about the Bulletin as follows:

"This is pretty much the best document. It's got the best management practices for doing construction in karst areas. That was written by a number of karst experts, some of them serving on the Karst Commission, and it's really the - it's the best - current state of art. You know, science changes all the time...But certainly, those are the best practices - that outlines the best practices for projects in karst terrain." (INT Ex.51-00011) (emphasis added)
77. Indeed, the WVDEP referenced the Bulletin in providing comments to Rockwool's 2019 Registration application, specifically stating as follows: "Revise sediment pond specifications to comply with the Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed..." (CR P 659)
78. Even James Hemme, P.E., consultant for Rockwool, used the Bulletin as a guidance document for Rockwool's Registration applications. (CR P2251)
79. Both the Bulletin and the KMP Template were included by the WVDEP in the certified record for this case, suggesting that they were used as reference documents. (CR P2272)

80. As related to karst mitigation, Larry Board stated that the WVDEP can only require an applicant to have a sinkhole mitigation plan if sinkholes form at the site. (INT Ex.49, Pg. 63) He further stated that the WVDEP would not know about possible karst issues unless the applicant so advises. (INT EX.49, Pg. 86)
81. Larry Board clearly stated: "We called the sinkhole mitigation plan a karst mitigation plan." (INT Ex.49, Pg. 129)
82. Rick Adams testified that the most important aspect of a KMP is how to repair existing sinkholes. (T1, Pg. 212)
83. Rick Adams had "little experience" in karst mitigation in 2017 and gained his experience by reading other KMPs and conducting "self-research." He had not taken any classes on karst mitigation but did consult with "a couple of geologists." (T1, Pgs. 220-221).
84. Yogesh Patel testified that he also believes a KMP just relates to the mitigation of sinkholes. (T2, Pgs. 165-166)
85. However, Andrew Parsons testified that a KMP should include an acknowledgment of the karst topography, and a commitment to "follow guidelines to protect the karst area or mitigate it." (INT Ex.50-00005) He then went on state that a KMP was the same thing as a sinkhole repair plan. (Id.)
86. Larry Board testified that he learned about karst by reading the USGS website. (INT Ex.49, Pg. 23) He stated the WVDEP has not offered any classes or other training on karst mitigation. Besides his own internet research, he had no other training in karst mitigation. (INT Ex.49 Pg. 24)
87. Andrew Parsons testified that he was offered no training or classes on karst mitigation. (INT Ex.50-00005)
88. Larry Board testified that KMP is a sinkhole mitigation plan. (INT Ex.49, Pgs. 27, 29) When asked what else besides sinkhole mitigation should be considered as far as karst mitigation, he was unable to identify any other practices. (INT Ex.49, Pgs. 37, 40)
89. Larry Board testified that he refers permit reviewers to certain websites to assist in their application reviews but was only able to specifically reference the National Wetlands Inventory website. (INT Ex.49, Pgs. 44-45)
90. When asked how the WVDEP ensures that permit reviews are consistent throughout the State, Andrew Parsons stated: "I can't answer. I don't know. I don't know how they do it." (INT Ex.50-00013)
91. Larry Board testified that permit reviewers "use their own professional judgment when they're doing a review." (INT Ex.49, Pg. 33) He stated that "each one has their own

styled of review and they have their own professional judgment and I do not re-review their applications." (INT Ex.49, Pg. 41)

92. Deputy Mandirola testified that is important for permits to be reviewed and approved in a consistent manner. (T3, Pg. 45)
93. Deputy Mandirola stated that is it the policy of the WVDEP that all applications and applicants are held to the same standard by "putting policies in place through the appropriate channels that are used across the agency." (T3, Pgs. 57-58)
94. Andrew Parsons was asked if it would be helpful for permit reviewers to have a definition of what a karst mitigation plan is. He responded as follows: "I think there might be some guidance perhaps for all reviewers because sometimes we use. Again, we have three primary reviewers, but sometimes other people help out if we get inundated with permits. So, it would probably help everybody if we had some type of agreement, definition, instruction on that." (INT Ex.50-00013)

The WVDEP did not Adequately Consider Karst Terrain and Mitigation in Reviewing
Rockwool's Registration Applications

95. Rick Adams testified that "[n]othing was required in the 2012 General Permit to address construction in karst terrain," and that he did not consider karst in his review of Rockwool's 2017 application. (T1, Pg. 215)
96. Yogesh Patel also testified that there were no requirements to consider karst mitigation under the 2012 Permit. (T2, Pg. 159)
97. Larry Board also confirmed that there were no requirements to consider karst mitigation under the 2012 Permit (INT Ex.49, Pg. 25) In fact, Mr. Board testified that there no requirements under any statute, rule or regulation to consider karst prior to the 2019 Permit. (Id.)
98. Andrew Parsons, permit reviewer, testified that there was no requirement to consider karst mitigation under the 2012 Permit. (INT Ex.50-00004)
99. Notwithstanding Legislative Rule § 47-58-4.10, which clearly requires that karst be considered for the siting and design of industrial establishments, and admitting that he was to follow this Rule, Rick Adams did not consider karst in any way in his review of Rockwool's 2017 application. (T1, Pgs. 251-254)
100. Director Emery stated that the Agency was "not able to deviate from legislative requirements and that "shall" means something is a requirement." (T1, Pgs. 172-173)
101. Yogesh Patel testified that his permit reviewers were required to use Legislative Rule § 47-58 when reviewing applications for industrial establishments. (T2, Pgs. 152-153)

102. Rick Adams was at first unable to recall how he considered karst in his review of Rockwool's 2019 application, other than the inclusion of the 2018 Sinkhole Remediation Plan (T1, Pg. 217) Rick Adams was further able to recall that also considered pond liners in his review of Rockwool's 2019 application. In any event, he confirmed that both of these karst considerations were "reactive to sinkholes." (T1, Pg. 228).
103. Rockwool's Sinkhole Remediation Plan was prepared and submitted to WVDEP after sinkholes had already formed at the site. (T1, Pgs. 213, 215-216, APP Ex.32-1502-1506)
104. Rick Adams confirmed that the first time he considered karst as related to the Rockwool site was in response to sinkholes forming at the site. (T1, Pgs. 253-254)
105. Sinkholes continued to develop requiring remediation. (APP Ex.32-1502-1506, APP Ex.33-1507, APP Ex.35-1519, APP Ex.39-1533, APP Ex.41-1546)
106. Rockwool was not required to conduct any site investigations related to karst. (T1, Pgs. 221, 256-257) Rick Adams testified that a site investigation in 2017 would have "made sense." (T1, Pg. 256)
107. Rick Adams permitted Rockwool to use large retention and wet ponds on karst terrain. (T1, Pgs. 250- 251)
108. Regarding the KMP Template (APP Ex.93-Section J), when asked if he considered the location of underground utilities in relation to karst features, Rick Adams could not recall. (T2, Pg. 78)
109. Regarding the KMP Template (APP Ex.93-Section J), when asked if he considered the application prohibition of fertilizers, pesticides, or chemicals within 100 feet of a sinkhole, Rick Adams could not recall. (T2, Pgs. 78-79)
110. Regarding the KMP Template (APP Ex.93-Section J), when asked if he considered the immediate stabilization of disturbed soil, Rick Adams could not recall. (T2, Pg. 79)
111. Regarding the KMP Template (APP Ex.93-Section J), when asked if he required the submission of at least on subsurface cross section, Rick Adams could not recall. (T2, Pg. 79)
112. Regarding the KMP Template (APP Ex.93-Section J), when asked if he considered the protection of natural karst swales, Rick Adams could not recall. (T2, Pg. 79)
113. Rick Adams believes water infiltration from the surface is "good" in that "it feeds the groundwater system," but had no understanding as to the impacts of large-scale infiltration above karst. (T1, Pgs. 249-260)

114. Rick Adams approved a dewatering technique for the rainwater reuse pond. This dewatering technique emptied into the nearest natural drain. (T1, Pgs. 243-244, CR P2355-2356, P2352-P2354, P2181-P2183)
115. As of the first day of the evidentiary hearing, 22 sinkholes had formed at the Rockwool site. (T1, Pg. 230) The WVDEP had engineering information suggesting that the area where the ponds were placed had potential for sinkhole risk. (CR P2491)

Rockwool Failed to Adequately Protect the Groundwater as it did not Meet or Exceed the Chesapeake Bay Bulletin Criteria for Karst Mitigation

116. The DEP completely failed to comply with the terms of the 2019 Permit and ensure that Rockwool addressed the important risks to the groundwater from design of its stormwater management system in karst hydrogeology.
117. Both expert witnesses agreed that the best, or only, design guidelines for stormwater management in karst terrain is contained in the Bulletin. (APP Ex.10) (*See, also*, APP Ex.11-0291, 0299; T3, Pg. 39)
118. The Bulletin, prepared after detailed work by numerous hydrogeologists across the Country, was developed “to guide better stormwater decisions when land is developed in karst regions of the Chesapeake Bay watershed.” (APP Ex.10-0250)
119. The Bulletin sets out a “[u]nified approach for Stormwater Design in Karst Terrain” with five specific areas of recommended actions, best practices, discouraged, or prohibited practices. (APP Ex.10-0264 -0273) As demonstrated below, the facts show that Rockwool adopted prohibited or discouraged practices in some cases, failed to comply with critical recommendations in others, and completely ignored other recommendations.
120. The Bulletin’s first substantive recommendation in Section 3 “Preliminary and Detailed Site Karst Investigation” required a preliminary detailed site investigation. (APP Ex.10-0255) A preliminary site karst investigation was not performed by Rockwool at any time.
121. Contrary to the Bulletin recommendations, the DEP did not request or require that any preliminary site evaluation be done and provided to DEP for evaluation as described in the Bulletin in 2017, 2018 or 2019. (APP Ex.10-0255, CR P752, CR P1350).
122. Section 3.1 of the Bulletin recommends that “a sequence of karst feature analyses, geotechnical investigations and borings must be performed prior to site layout and the design of any stormwater practice to minimize the risk of unintended consequences or failure.” (App Ex.10-0252) The Bulletin lists a comprehensive list of the pertinent site data to collect. (*Id.*, at 0256)
123. Contrary to the Bulletin’s recommendations, no detailed site assessment or preliminary site karst investigation was conducted. (APP Ex.10-0255)

124. There was a site investigation performed prior to construction in 2017; however, this investigation was done according to the building code requirements relied upon by Ranson, rather than stormwater or karst evaluation, stating, “This geotechnical study has been planned to comply with the 2015 International Building Code ("IBC").” (INT Ex.5-00036) While the report was admitted into evidence, no witness was called to explain what the study was being offered for. No Intervenor witnesses testified about the Specialized Engineering report. (INT Ex.5-0007)
125. Section 3.4 of the Bulletin ‘Boring Requirements for Centralized Stormwater Facilities’ recommends that “In general, a minimum of five borings shall be taken for each centralized stormwater facility (or five per acre, whichever is greater), with at least one on the centerline of the proposed embankment and the remainder within the proposed impoundment.” (APP Ex.10-0257)
126. Contrary to these recommendations, an inadequate number of borings was taken. Both the water for reuse pond and the stormwater pond at Rockwool’s facility are greater than one acre. According to the Geotechnical Engineering Report, performed by Specialty Engineering in 2017 one boring was done in each of the large storm water ponds, no boring was done in the large bioretention pond and no borings were done in the temporary stormwater pond. (INT Ex. 5-00036) (See, also, APP Ex.18-0594; App Ex.46-1841; CR P1306; CR P1476) However, there is no evidence that the borings information was asked for by the WVDEP or provided by Rockwool.
127. One of the air track drillings that was made in the rainwater reuse pond was found to have a nearly 40-foot void in the south east portion during the geotechnical investigation. No further geotechnical investigation was done in the rainwater reuse pond to additionally delineate 40-foot void beneath the future pond location. (INT Ex.5-00037, 00092)
128. According to Section 3.4 of the Bulletin, entitled “Boring Requirements for Centralized Stormwater Facilities” it states: Upon Completion, the boring should be backfilled with impermeable plugging material such as grout mixed with bentonite, particularly when the boring intercepts subsurface voids. (APP Ex.10-0258)
129. According to the Geotechnical Report, at least 6 of the borings performed for this study at the Rockwool site found voids. (INT Ex.5-00015) There is no evidence that the borings were ever grouted, or if so, how they were grouted.
130. Section 3.5 of the Bulletin, Plan Submittal section, states: “At least one subsurface cross section should be submitted with the stormwater plan, showing confining layers, depth to bedrock and water table if encountered. It should extend through the center-line of the proposed centralized stormwater facility, using actual geophysical and boring data.” (APP Ex.10-0258)
131. Rockwool did not submit any subsurface cross sections much less any extending through the center of the proposed centralized stormwater facilities in any of its applications.

132. The DEP permit reviewer did not ask for a subsurface site investigation to be performed, did not ask for any site investigation data, and did not review any karst site. (CR P751, CR P1979 - 1981) Thus, there is no basis in the record for the DEP to have concluded that any preliminary site investigation or detailed site investigation was performed to any standard.
133. Section 4 of the Bulletin states “[t]he other key task in karst terrain is to assess whether the proposed operation or activity being built has a significant risk of becoming a future stormwater hotspot.” (APP Ex.10-0258)
134. Contrary to the requirement, no hotspot evaluation was performed by the WVDEP at any time. There was no evidence offered that the permit reviewer requested information about “hot spots” or considered them as an issue of concern. (App Ex.10-0265, CR P 0751, P 1979-1981)
135. Section 4 of the Bulletin defines a stormwater hotspot as: “Stormwater hotspots are operations or activities that are known to produce higher concentrations of stormwater pollutants and/or have a greater risk for spills, leaks or illicit discharges.” (APP Ex.10-0258)
136. The DEP never conducted any evaluation or made any determination of whether locations within the site should have been designated as a stormwater hotspot. Section 4 gives management strategies for Stormwater Hotspots and states at (3): “Infiltration Prohibition. If a site is classified as a potentially severe hotspot, the risk of groundwater contamination is so great that infiltration of stormwater is prohibited. In these cases, an alternative stormwater practice, such as closed bioretention, sand filters or constructed wetland must be used to filter the entire WQv before it reaches surface or groundwater.” (APP Ex.10-0260)
137. Section 5 of the Bulletin defines nineteen key design principles for designing facilities in karst. There is no evidence that Rockwool referred to these design principles. (APP Ex.10-0263-0265)
138. Section 5.1 of the Bulletin recommends that sediment traps or basins should be located away from known karst feature. (APP Ex.10-0263)
139. In 2017, a nearly 40-foot void was found under the south east portion of the rainwater reuse pond during the geotechnical investigation. (INT Ex. 5-00037, 00092) There is no evidence this finding, or the report, was ever provided to the WVDEP. There is no evidence that the permit reviewer ever asked whether a preliminary site evaluation had been performed. The rainwater reuse pond location was not changed following the identification of the 40-foot void during the geotechnical investigation. (INT Ex.5-00037, CR P1476.)
140. Then the rainwater for reuse pond developed 7 sinkholes during construction and is now located above these known karst features. (APP Ex.50-1845)

141. Stormwater basin number one developed 3 sinkholes during construction and now is located above 3 known karst features. (APP Ex.50-1845) One of the sinkholes in basin number one was approximately the size of a school bus. (APP Ex.32-1504)
142. Installation of pond liners started in September of 2019. (AppEx.38-1530) The ponds were therefore unlined from the start of construction (2017) to at least September, 2019. (App Ex38-1530)
143. The Bulletin recommends to: “Minimize site disturbance and changes to soil profile, including cuts, fills, excavation and drainage alteration, near karst features.” (App Ex. 10-0263)
144. Contrary to the above, Rockwool made large changes in the soil profile, including cuts, fills, excavation, and drainage alteration to build the ponds. (CR P1622-P1633) It also made drastic alterations in the drainage of the site. (CR P779-P780)
145. The Bulletin states: “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.” (APP Ex.10-0263) Yet, Rockwool used sediments traps and basins. [Hearing Transcript Day 4 ("T4"), Pg. 25]
146. The Bulletin states “[t]he use of centralized stormwater practices with large drainage areas is strongly discouraged even when liners are used...” (APP Ex.10-0264)
147. There was no evidence presented by Rockwool that it ever considered anything other than the large stormwater ponds that were planned from the beginning and are now being used. (CR P751, 1979-81)
148. The Bulletin requires builders to “Minimize the amount of impervious cover created at the site so as to reduce the volume and velocity of stormwater runoff generated.” (APP Ex.10- 0263)
149. The Rockwool site will have 29.12 acres of impervious cover ("IC"). (CR P1476) The permanent stormwater pond drained 48.9 acres during construction and 15.8 acres of that is impervious cover. (CR P1598) The permanent stormwater pond (basin number 1) will drain 39.0 acres and 17.0 acres of that is impervious cover. (CR P1476) The rainwater reuse pond drained 24.7 acres during construction and 15.8 acres of that is impervious cover. (CR P1598) (The rainwater in the rainwater reuse pond was not reused during construction it was simply a stormwater pond designed with no outlet.) (CR P1476) The rainwater reuse pond will drain 14.7 acres and 11 acres of this is impervious cover. (CR P1476)
150. The Bulletin also identifies “distributed treatment” is recommended over centralized stormwater facilities, which are defined as any practice that treats runoff from a contributing drainage area greater than 20,000 square feet IC, and/or has a surface ponding depth greater than three feet. Examples include wet ponds, dry extended detention (ED) ponds, and infiltration basins.” (APP Ex.10-0263)

151. Contrary to that principle, Rockwool's Stormwater basin number 1 will serve 740,520 square feet of IC. (P1476) Rockwool's Rainwater for reuse pond will serve 479,160 square feet of IC. (P1476)
152. The rainwater for reuse pond has a surface ponding depth of greater than 10 feet and filled to capacity requiring dewatering several times during construction. (CR P1476, P2181, P2183, P2352, P2353, P2355, P2356)
153. The Bulletin recognizes that "[c]entralized treatment practices require more costly geotechnical investigations and design features than smaller, shallower distributed LID practices. In addition, distributed LID practices generally eliminate the need to obtain an underground injection permit." (APP Ex.10-0263)
154. There is no evidence that the DEP objected, asked questions for clarification, or investigated Rockwool's use of large basins at the facility.
155. The Bulletin states that "As a general rule, the stormwater systems should avoid large contributing areas, deep excavation or pools of standing water." (APP Ex. 10-0265)
156. Contrary to this principle, Rockwool's stormwater system has very large contributing areas, required deep excavation, and led to pools of standing water. There is no evidence that the DEP considered this issue or objected to it. (CR P751, CRP 1979-1981)
157. The Bulletin states: "The use of either dry ED or wet ponds in karst terrain is highly restricted, because of frequent recurring failures due to sinkhole formation. At a minimum, designers must demonstrate that: A minimum of six feet of unconsolidated soil material exists between the bottom of the basin and the top of the bedrock layer." (APP Ex. 10-0272)
158. It cannot be adequately determined if six feet of nonconsolidated soil material exists between the bottom of the basin and the top of the bedrock layer in the stormwater basin number 1 or the rainwater for reuse pond because Rockwool did not provide enough information to determine. (CR P1622, P1627)
159. Contrary to the Bulletin recommendation, the evidence clearly demonstrates that it is impossible for Rockwool to have 6 feet of nonconsolidated soil materials between the bottom of the basin and the top of the bedrock layer. Listed below are examples of this. Notwithstanding that the WVDEP had this evidence in hand at the time of its permit review, the information was not considered during the review process.
 - Exposed bedrock can be seen in the inspection photos of the stormwater basin number 1 in the 10-2-2018 inspection report. (APP Ex.32-1504)
 - Exposed bedrock can be seen in stormwater basin number 2 in the 10-2-2018 inspection report. (APP Ex.32-1506)
 - Exposed bedrock can be seen less than 6 feet from the surface in the 1-29-2019 inspection report in the rainwater for reuse pond. (APP Ex.35-1521)

- Exposed bedrock can be seen less than 6 feet from the surface in the 1-29-2019 inspection report in the stormwater basin number 1. (APP Ex.35-1521)
 - Exposed bedrock can be seen in the 10-11-2018 inspection report in the rainwater for reuse pond. (APP Ex.35-1510)
 - Rockwool consolidated the soil at the bottom of the basin in both the stormwater basin number 1 and the rainwater for reuse pond. (CR P2233, P2217, P662, P2245 - 6)
160. The Bulletin states that “Large scale infiltration is defined as individual practices that infiltrate runoff from a contributing drainage area between 20,000 to 100,000 square feet of impervious cover. These practices should not be used in karst terrain due to concerns about sinkhole formation and groundwater contamination. Micro-and small-scale infiltration or bioretention are preferred stormwater alternatives in karst terrain.” (APP Ex.10-0273)
 161. Contrary to this design criteria, outlet number 001 drains 740,520 square feet of IC. (P1476) Outlet number 002 479,160 square feet of IC. (P1476)
 162. Table 6 of the Bulletin, “Required Groundwater Protection Liners for Ponds in Karst Terrain” (WVDEP, 2006 and VA DCR, 1999) states that Pond excavated within three feet of bedrock need 24 inches of clay with maximum hydraulic conductivity of 1×10^{-6} cm/sec. (APP Ex.10-0273)
 163. Contrary to that recommendation, Rockwool has “4 inches of site clay Soils compacted 95%” not 26 inches of uncompacted soil at the under the pond liners. (CR P662)
 164. The design principle for sinkholes state “When existing or new sinkholes are determined to require remediation, the repair will use appropriate techniques as outlined in WVDEP (2004), MDE (2000) or CCDP (2007). These techniques are related to the size of the sinkhole and are further described in Section 7.” (APP Ex.10-0265)
 165. Rockwool’s Sinkhole Repair Plan (APP Ex.25-1477; CR P 721-723, 2195-2197, 2221-2223) is fundamentally different than the WV DEP 2004 repair plan, in material ways. (CR P46-54)
 166. First, Rockwool’s Sinkhole repair plan allows flowable fill to be deposited directly into the throat of the sinkhole. The WVDEP 2004 plan does not. (CRP48-P51)
 167. The WVDEP Sinkhole Mitigation Guidance states under section ‘Acceptable Materials’ that “Engineering fabric - must meet the applicable requirements of AASHTO M-288. Aggregates - fine aggregates, gravel, or rock rip rap that conforms to the West Virginia Department of Highways, Standard Specifications for Roads and Bridges, Sections 702, 703, and 704”. (CR P48)

168. Acceptable materials listed in the WVDEP Sinkhole Mitigation Guidance do not include flowable fill. (CR P48) The Bulletin does not describe filling dropouts or sinkholes with flowable fill. (APP Ex.10-0274) There is no evidence that the DEP addressed this disparity. To the contrary, Rockwool's Type 2 Repair states: Backfill the dropout to within 5 feet of the ground surface with flowable fill. (CR P722)
169. The Bulletin also states "Grouting is generally discouraged, unless it is combined with the graded filter (a) within moderate to large sinkholes. Borings are placed in the ground adjacent to the sinkhole and a concrete (grout) mix is injected by pressure or gravity into the subsurface until the throat is sealed. Grouting may be used to remediate small diameter voids, such as test borings or abandoned well." (APP Ex.10-0275)
170. The WVDEP Sinkhole Mitigation Guidance has two cross-sectional diagrams. (CR P53-54) Rockwool's Supplemental Sinkhole Repair Procedure does not have any cross-sectional diagrams. (CRP721-723) The WVDEP Sinkhole Mitigation Guidance gives an entire half page consideration to the nature of the sinkhole and future use. (CR P46-47)
171. On October 10, 2018, Rick Adams emailed Rockwool consultant James Hemme, of ERM, a copy of an example of another company's Sinkhole Maintenance, Inspection and Repair Plan. (CR P2211-2212) This Repair Plan had cross sectional diagrams and did not allow flowable fill to be placed in the throat of the sinkhole. (CR 02-23-20, P2211-2213)
172. The Bulletin has a section entitled Sinkhole investigation describing appropriate subsurface investigation of sinkholes prior to repair planning. (APP Ex.10-0274) Rockwool's Supplemental Sinkhole Repair Procedure does not even discuss evaluation procedures to define the subsurface characteristics of the sinkhole. (CR P721-723)
173. The WVDEP Sinkhole Mitigation Guidance has a section entitled Vegetated Buffer Area discussing buffer areas to increase filtration of stormwater draining to sinkholes. (CR P46-47) Rockwool's Supplemental Sinkhole Repair Procedure has no discussion of Vegetated Buffer Areas or filtration of stormwater prior to draining to sinkholes. (CR P721-723)
174. There was no evidence that DEP required cross-sectional diagrams, no evidence that the DEP stopped Rockwool from using the Bulletin discouraged practice of using grout or flowable fill directly into the sinkhole. (CR P1346, 1979)

Rockwool's LOD Exceeded 100 Acres, Thus Requiring its Initial 2017 Application to be Submitted for Public Comment and Hearing

175. Rick Adams testified that when he reviewed Rockwool's 2019 application, that he relied upon information contained in and his previous reviews of Rockwool's 2017 and 2018 applications. (T1, Pgs. 211-212)
176. Rick Adams testified that he relied on Rockwool to submit accurate information. (T1, Pg. 238)

177. Section G.4.b.5. of the 2012 Permit states: “Projects that are expected to discharge to Tier 3 waters or that are expected to disturb 100 or more acres, or that the grading phase of construction is expected to last for more than one year, *shall* submit the application and SWPPP at least 100 days prior to construction *to allow for the public notice procedure.*” (INT Ex.15-00015) (emphasis added)
178. The 2012 Permit defines LOD or "Disturbed area" as “the total area of land disturbing activity that will take place during all phases of a construction project, including, but not limited to, all waste and borrow sites, utility installation, road building, mass grading, and site development.” (INT Ex.15-00010)
179. The “Directions For Use,” as related to LOD, states, in relevant part: “Include ALL disturbed areas directly related to construction of the entire project (offsite borrow areas, offsite waste sites, access roads, utility installation, sediment controls, etc.).” (APP Ex.17-0552)
180. In its 2017 Registration application, Rockwool reported its LOD as 98.8 acres. (APP Ex.12-0321, CR P753)
181. When asked whether disturbance for utility lines is supposed to be included in the LOD, Rick Adams answered “They would be – have to be included unless they were covered under a separate stormwater construction permit.” (T1, Pg. 246)
182. Rockwool did not include utility installation in the LOD. (CR scandisk⁸, APP Ex.48-1843)
183. After Rockwool’s LOD was submitted as 98.8 acres, it increased by an unknown amount, but clearly more than .5 acres, to prepare for the installation of the natural gas utility line across Rockwool's property to deliver natural gas to the facility. (APP Ex.48-1843) This land disturbance would have been known to Rockwool at the time of the permit application. (CR scandisk, APP Ex.48-1843, APP Ex.50, JCF-1845)
184. After Rockwool’s LOD was submitted as 98.8 acres, the LOD increased to accommodate the water line utility across Rockwool’s Property to deliver water to the facility. (APP Ex.48-1843) This land disturbance would have been known to Rockwool at the time of the permit application. (CR scandisk, APP Ex.48-1843, APP Ex. 50-1845)
185. No comment was made by the WVDEP permit reviewer to Rockwool, and no correction requested by the permit reviewer regarding the inclusion of the utility installation for the water or natural gas line at the Rockwool site. (CR P751)

⁸ The LOD was required to be provided to the WVDEP by Rockwool as a set of shape files. These files were included in the CR on a scandisk. In the table of contents, the page number for the LOD shape files appears as “scandisk.” Thus, the reference here where a page number would normally go is “scandisk.” Presumably, the WVDEP has provided the board with a copy of the scandisk containing the LOD shape files.

186. Rick Adams confirmed that “any access roads” should be included in the LOD. (APP Ex.83, Pg.41, Lines 11-19) There are at least three access roads that Rockwool used for construction purposes, but Rockwool did not include any of them in its LOD calculations. (T2, Pgs. 91-92) (APP Ex.18-0587, 0588, 0591, APP Ex.48-1843, CR P2325-P2327, scandisk)
187. No comment was made, or correction requested by Rick Adams for Rockwool to include the construction access roads referenced in Paragraph #169 in the LOD in 2017 or 2019. These roads were not covered by any other NPDES permit at the time Rockwool employed them. (CR P571)
188. Separately, an internal construction road was visible on the site maps from 2017 (APP Ex.18-0595) This road was not included in the LOD and the permit reviewer did not comment or request a correction (CR P751). The internal construction road not included in the 2017 LOD was found to be disturbed on a subsequent inspection and required to be included (APP Ex.34-1517).
189. The permit reviewer confirmed that the internal construction road referenced in Paragraph #172 above was not included in the LOD during the 2017 application, but should have been if Rockwool intended to include it (T2, Pgs. 91-92).
190. Rockwool thereafter included .49 acres of the entire additional LOD area. (APP Ex.34-1518, CR P2152-2153). The addition of that .49 acres pushed the LOD to 99.29 acres. The DEP accepted this calculation, but inadequate information exists to determine whether it was accurate. Neither Rockwool nor the WVDEP submitted any additional information to verify the calculation was correct.
191. There are numerous inconsistencies in the depiction of the LOD throughout the site maps of the 2017 application with drastic differences in areas included ((CR P758, P759, P779, P780, P797; APP Ex.18-0603, 0606). However, no comment was made, no clarification sought, or any correction requested by the permit reviewer regarding the disparity in LOD at the south or north portion of the site. (CR P751)
192. The LOD was superimposed on the northern most portion of the proposed reuse pond. The reuse pond could not be constructed without disturbing land beyond the original limit of disturbance and had to be expanded to accommodate the additional land disturbed (APP Ex.48-1843, Ex.50-2019) However, no additional LOD was added to the permit application, and no questions were asked by the permit reviewer regarding the additional disturbed lands. (CR P751)
193. Rick Adams confirmed that if, in 2017, the LOD was more than 100 acres, the application would have gone to public notice and comment. (T2, Pg. 92) Mr. Adams confirmed that the public was not given notice or the opportunity to comment until 2019. (T2, Pgs. 92-93)
194. Rick Adams acknowledged that “... the public couldn’t have offered any input perhaps even on the karst issues until 2019?” (T2, Pg. 93)

Rockwool's Site Grading Exceeded the One-Year Timeframe, Thus Requiring its Initial 2017 Application to be Submitted for Public Comment and Hearing

195. The 2012 Permit defines "Construction Activity" as "land disturbance operations such as clearing, grubbing, grading, filling, and excavating during site development for residential, commercial or industrial purposes. This includes, but is not limited to, access roads, borrow and spoil areas." (INT Ex.15-00010)
196. Section G.4.b.5. of the 2012 Permit states: "Projects that are expected to discharge to Tier 3 waters or that are expected to disturb 100 or more acres, or that the grading phase of construction is expected to last for more than one year, *shall* submit the application and SWPPP at least 100 days prior to construction *to allow for the public notice procedure.*" (INT Ex.15-00015) (emphasis added)
197. In response to Question 12 of the ESS application, Rockwool stated that the relative timeline of construction activities was "Install perimeter controls = 1 week Clearing and grubbing = 1 week Strip and stock topsoil = 2 weeks, Earthwork = 17 weeks" (APP Ex.12-0320) The projection totaled 21 weeks of grading activities.
198. The 2012 Permit defines "Grading" as meaning "changing surface contours by removing soil and stone from one place and building it up in another." (INT Ex.15-00010)
199. Rockwool started grading on November 1, 2017, as confirmed by Matte Drejstel of Rockwool in an October 4, 2018 email to Rick Adams. (APP Ex.42-1551)
200. Rockwool was continuing to grade as defined in the 2012 Permit on September 12, 2019. (CR P2166, APP Ex.38-1531)
201. According to Rockwool's construction sequence, grading continued under the 2012 Permit until October 2020. (CR P1596)
202. Rick Adams confirmed that Rockwool exceeded the one-year grading activity timeframe. (T1, Pgs. 247-248)
202. Rick Adams testified that if Rockwool's grading timeframe in 2017 was going to exceed 1 year, then the 2017 application would have had to be submitted for public comment and hearing. (T1, Pg. 249)

IV. Conclusions of Law

1. The Board has jurisdiction to decide this appeal pursuant to W.Va. Code § 22B-1-7 (2020).
2. The Board decides cases *de novo*, that is to "be the ultimate finder of the fact and to act independently on the evidence before it." Probst v. Director, Division of Office of Water

Resources, Department Environmental Protection, Final Order, March 29, 2012, 11-06-EQB, at 7. See, also, Fola Coal Company, L.L.C., Appellant, v. Lisa A. McClung, Dir., Division of Water and Waste Management, W. Va. Department of Env'tl. Protection, Appellee, EQB Order, Appeal No. 08-22-EQB (Dec. 10, 2009), citing W. Va. Division of Env'tl. Protection v. Kingwood Coal Co., 200 W. Va. 734, 745, 490 S.E.2d 823, 834 (1997). In doing so, the Board will hear the evidence, review the Certified Record, consider all testimony and exhibits, and determine whether the WVDEP appropriately approved Rockwool's Registration. The Board will also determine whether the WVDEP failed to provide Appellants the required opportunity for notice and public comment on Rockwool's 2017 permit application, which they assert would have allowed earlier consideration and mitigation of karst risks. Finally, the Board will decide whether WVDEP has met its obligation to have a uniform definition of and set of standards and expectations for what is expected of all applicants seeking to build in vulnerable karst areas, along with a reasonable basis for departing from such expectations.

3. Legislative Rule § 47-58-4.10 requires that karst mitigation be considered in the siting and design of industrial establishments. It specifically states as follows:

4.10. Site Selection Criteria -- 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 Legislative Rule was effective and had to followed for all industrial establishment applications under both the 2012 and 2019 Permits.

4. The 2019 Permit requires that the applicant to submit a KMP. It specifically states as follows:

II.I.2.c. A GPP containing a Karst Mitigation Plan shall be submitted with applications for registration under this NPDES General Permit for all areas with Karst topography.

"Karst Mitigation Plan" is not defined in the 2019 Permit or any other rules or regulation.

5. The Board has to decide whether Appellants have provided sufficient evidence to support a finding that the Appellee's decisions and actions were incorrect. Wetzel County Solid Waste Auth. V. Chief, Office of Waste Management, Div. of Env'tl. Protection, Civil Action No. 95-AA-3 (Circuit Court of Kanawha County, 1999). If so, then the burden shifts to the Appellee to produce evidence that its decision was sound, regardless of the evidence produced by the Appellant. Finally, Appellants have the opportunity to show that the evidence produced by the Appellee is pre-textual or otherwise deficient.

6. The Appellants have met their burden of establishing that Rockwool did not submit a sufficient KMP or otherwise adequately mitigate karst risk; that Appellants should have had an opportunity to submit earlier public comment; and that the WVDEP inconsistently and arbitrarily conducted its permit review and did not follow the only available guidance for karst mitigation.

7. West Virginia Code § 22-11-1, et seq., sets out the policy and laws of the state to establish "reasonable standards" in controlling the pollution to the waters of the state. The West Virginia Legislature has adopted requirements governing Water Quality Standards, which govern "the discharge or deposit of sewage, industrial waste and other wastes into the waters of the state and establish water quality standards for the waters of the State..." W.Va. Code § 47-2-1 (2020). The Water Quality Standards are the foundation of the water quality-based control program mandated by the federal Clean Water Act. The Legislature declared in these Water Quality Standards that any condition "which adversely alters the integrity of the waters of the

State...shall not be allowed.” W.Va. Code § 47-2-3.2.i. Additional requirements for the protection of groundwater are set forth in Groundwater Protection Regulations, 47 CSR 58.

8. Implementation of the Legislative Rules governing clean water fall to the Division of Water and Waste Management. Director Emery agreed that if the Rules stated that a thing “shall” be done, she was required to comply with that rule, and that the Agency did not have the authority to deviate from Legislative requirements. (T1, Pgs. 172-173)

9. The Legislature also established requirements for implementing the state NPDES program in W.Va. § 47 CSR 10. W.Va. §47-10-3.1 Permit Requirement, requires that all entities that discharge to state waters must have a permit issued pursuant to the state NPDES program. (emphasis added) §47-10-4.1, Duty to Apply, requires entities to submit a complete application in the manner and on a form described by the director, ...including submission of “accurate and complete information” by the signatory §47 CSR 10-4.6.d, or any information requested by the Director. §47 CSR 10-5.8.

10. Since 1994, the Groundwater Protection Regulations of the State, in § 47 CSR 58-4.10 “Site Selection Criteria,” have required that in areas that are deemed to be vulnerable based on geologic or hydrogeologic information, the facility or activity design “must adequately address the issues arising from locating in the area of a potentially more vulnerable groundwater resource.” (emphasis added). The significance of the risks from inadequate consideration of construction in karst was presented by both experts that in this case. (APP Ex.11-287-0319; INT Ex.39-00001-00005)

11. It is undisputed that the site selected by Rockwool to build its facility was in an area deemed to be vulnerable because of its location in karst hydrogeology. As Rockwool stated in its initial 2017 SWPPP, “Jefferson County is within a prevalent karst area.” (APP Ex.18-0564).

12. Appellants' assertion that the WVDEP should have--but did not--ensure that Rockwool adequately addressed the vulnerability to the groundwater resources of the State, is supported by the record. The testimony of the WVDEP witnesses confirmed that at the time of the 2017 initial registration application there was no consideration of the risks presented by the design and construction of the Rockwool site in karst hydrogeology. The permit reviewer for Rockwool testified that when he reviewed the original 2017 application, he did not consider karst because it was not required by the terms of the 2012 permit. (T1, Pg. 215)

13. Rockwool's initial application for Registration under the NPDES program was filed on July 31, 2017, under the terms and conditions 2012 Permit. The 2012 Permit expired as of February 9, 2019; and coverage under this Permit was no longer available as the terms and conditions of that permit "ceased to exist."⁹ Thereafter, Rockwool's activities were governed by the terms and conditions of the 2019 Permit.

14. Rockwool's argument that is it was not required to provide a KMP does not comport with federal and state law. If this Board were to agree with that position, it would create a legal quagmire where applicants would have to comply with the terms of varying General Permits.

⁹ The 2019 Permit was challenged before the EQB, and the WVDEP prepared a draft modified permit as part of a resolution of that case. June 10, 2019, Order, West Virginia Manufactures' Association, Jefferson Asphalt Products, and Contractors' Association of West Virginia v. Director, Division of Water and Waste management. However, the EPA objected to several terms of the proposed draft modified permit. Subsequently the proposed draft modified permit was withdrawn by the DEP. Thereafter, a new permit was issued, effective February 9, 2019. At that point, the 2012 permit "ceased to exist." (APP Ex.136-3621-3627) Entities like Rockwool, which were registered prior to February 9, 2018, were required to apply for coverage under the 2019 permit. *See*, 2019 Permit, Preface. (APP Ex.8-0201.) Under the terms of the new 2019 permit, Rockwool was not eligible to simply file a certification letter, i.e., "certify," instead of filing a full application. Presumably Rockwool knew this, and did not file a certification letter, rather it filed a full application, as required. Moreover, in the EPAs' October 31, 2019 objections to the DEP's draft modified 2019 permit, the EPA clearly stated that it would not allow a situation "extending the effective date of the 2012 CGP beyond five years, as well as having two permits in effect simultaneously. Both practices are inconsistent with federal regulations." (APP Ex.136-3621-3627)

15. Under the terms of both the 2012 and the 2019 Permits, a public notice and comment period was required if an applicant was going to disturb over 100 acres or if grading of a site continues beyond one year. (APP Ex.8-0206, 0207, INT Ex.15-00015)

16. While Rockwool's initial application stated it was only disturbing 98.8 acres, the Appellants offered substantial evidence that the LOD exceeded the 100 acres, which evidence was available to WVDEP at that time, and which should have triggered a public notice at the initial stages of construction. However, WVDEP took no action to verify the LOD inaccuracies, and ignored completely or failed to review evidence that Rockwool had exceeded the 100 acres. The permit reviewer said he had no reason not to believe Rockwool, so he did not take the time required to identify the gross inaccuracies and inconsistencies. (APP Ex.83, Pgs. 37-47.)

Likewise, under the terms and conditions of both Permits, if grading exceeded a year, public notice and public comment were required. Id. It is undisputed that Rockwool's grading activities exceeded one year. There was no evidence offered by either Rockwool or the WVDEP to the contrary. If either the LOD or grading timeframe was correctly stated or determined, then the initial application would have required public notice, comment, and hearing, thus providing the public with the opportunity to comment on the inadequate karst mitigation prior to construction.

17. Under the 2019 Permit, a KMP was required of all permit applicants in karst terrain as part of the mandatory Groundwater Protection Plan. (APP Ex.8-0220) Rockwool did not submit a sufficient KMP. Instead, after sinkholes began to develop on the site, and only upon the request of the Agency, did Rockwool submit a minimal sinkhole repair plan. (APP Ex.25-1477-1479)

18. Appellants have presented substantial evidence that the issuance of the approval of the

2019 Registration, without a sufficient KMP, was “clearly wrong in view of the reliable, probative and substantial evidence on the whole record,” (W.Va. Code §29A-5-4(g)(5); Wade Painter v. David Ballard, Warden, 237 W.Va. 502 (Sup. Ct of Appeals 2016), citing Nestle Waters North Am., Inc. c. City of New York, 121 A.D.3d 124, 990 N.Y.S.2d 512,514 (2014).

19. “As a general rule, an administrative agency action is deemed to be “arbitrary” if it is taken without a sound basis in reason, and generally without regard to the facts. Id.

20. The WVDEP knew that there was inadequate information about what a KMP should consist of and promised to publish such guidance in its Responsiveness Summary to public comments on the 2019 General Permit. (APP Ex.97-2747, 2767)

21. In fact, a KMP Template was developed. Board testified he developed a template on his own, but made no mention of whether it was in response to the WVDEP public commitment to do so. It was not applied to Rockwool under the 2019 permit. There was simply no adequate explanation provided for the strange shift in the agency’s development, reliance and use of the KMP Template with other permittees, authorized permit reviewers, and the public, but not with Rockwool. *See also* Friedman v. Sebelius, 686 F.3d 813, 828 (D.C. Cir. 2012) (agency decision arbitrary and capricious because “it failed to explain its departure from the agency’s own precedents”).

22. Further, the Appellee never claimed that the KMP Template contents, and other guidance documents, were inappropriate or wrong, or otherwise provided any other reasoned basis for ignoring such specific, and sound, guidance with Rockwool. That is particularly true for the Chesapeake Bay Bulletin, which was developed after substantial work by hydrogeologists specifically to provide the guidance for stormwater management best practices for construction in karst terrain. Rockwool's expert agreed.

23. The Board has reviewed, and relied upon the Bulletin, in reaching its decision that Rockwool, although meeting some of the recommendations, did not follow the majority of the recommendations in the Bulletin. In fact, it specifically engaged in several prohibited or discouraged practices in its design and construction in karst terrain.

24. The WVDEP did not offer any evidence that it relied upon any guidance in determining the adequacy of the actions taken by Rockwool. And Intervenor, while offering an expert who testified that it “met or exceeded” (INT Ex 51-00009) the Bulletin’s recommendations, did not offer testimony or detail in his report why Rockwool adopted prohibited or discouraged practices, whether it considered alternatives, or why suggested or recommended practices were adopted.

25. To assess whether an agency action is arbitrary and capricious, the Board can consider whether the agency “considered the relevant factors and articulated a rational connection between the facts found and the choice made.” Baltimore Gas & Elec. Co. v. NRDC, 462 U.S. 87, 105 (1983) (citing Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc., 419 U.S. 281 (1974) at 285–86). Here, there was no articulated connection between the facts found (i.e., that a sufficient KMP was not submitted by Rockwool and that Rockwool did not follow the best management practices expressed in the Bulletin) and the decision made by WVDEP to approve Rockwool’s Registration. Neither the Appellee, nor the Intervenor, offered a sufficient evidence to overcome Appellants' proof.

26. This case was, essentially, about risks to groundwater inherent from construction in karst, a risk recognized by the Legislature since 1994 in §47 CSR 58 4.10 “Site Selection Criteria.” The issue, and legislative rule requirement, was made even more explicit by being included as a permit term and condition in the 2019 Permit. We recognize that courts should overturn agency

action where the agency has “entirely failed to consider an important aspect of the problem, [or] offered an explanation for its decision that runs counter to the evidence before the agency.”

Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). In this case, as set forth in the Findings of Facts, the WVDEP staff had no explanation for why it failed to consider whether Rockwool’s design was adequate to overcome the risks inherent in construction in vulnerable karst terrain under the siting requirements in 2017, why it did not require a sufficient KMP under the 2019 permit, or why it abandoned the use and reliance on the Bulletin in determining acceptance criteria for best management practices.

27. The U.S. Supreme Court has said that an agency must “examine the relevant data and articulate a satisfactory explanation for its action. Motor Vehicle Mfrs. Ass’n, at 43. That is what we did, and we find that the record here is bereft of a satisfactory explanation or sound basis for why a three-page responsive sinkhole repair plan was an acceptable substitute for the legislatively required KMP from Rockwool. Coupled with the failure to provide notice and public comment and the rejection of utilizing the Bulletin, at least as guidance, to evaluate Rockwool’s Registration, the Appellee’s actions leave us no choice but to reject its decision and issue our own.

28. As outlined above, we hereby **VACATE** the decision to grant Rockwool’s Registration, and require the WVDEP to require Rockwool to hire an independent engineering and design firm to evaluate the current status of the Rockwool facility, and to make recommendations of what, if any, additional actions should be taken to protect the groundwater from contamination. The independent report shall be made public, and comments, objections or alternative information should be allowed by Rockwool, the Appellants, and the public. The WVDEP should then make recommendations to the Board, which is retaining jurisdiction of the case, on what additional

conditions shall be placed into the Registration. Additionally, the Board directs the WVDEP to take such action as necessary to provide guidance to all applicants on what, specifically, is required to constitute an adequate KMP.

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