

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
BEFORE THE ADMINISTRATOR**

IN THE MATTER OF )  
 ) PETITION FOR OBJECTION  
 )  
Part 70 Operating Permit Renewal )  
Operation Permit No. R30-03700108-2025 )  
 ) Permit No. R30-03700108-2025  
Issued to Roxul USA Inc – RAN Facility )  
Ranson, Jefferson County, West Virginia )  
 )  
Issued by the West Virginia Department of )  
Environmental Protection )  
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\_\_\_\_\_ )

**PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE  
ISSUANCE OF TITLE V PERMIT NO. R30-03700108-2025 TO THE  
ROXUL USA dba ROCKWOOL FACILITY**

Pursuant to section 505(b)(2) of the Clean Air Act (“CAA” or “Act”), 42 U.S.C. § 7661d(b)(2), and EPA implementing regulations at 40 C.F.R. § 70.8(d), the Jefferson County Foundation (“JCF” or “Petitioner”) respectfully petition the Administrator of the U.S. Environmental Protection Agency (“EPA” or “Agency”) to object to the initial Part 70 Operating Permit No. R30-03700108-2025 (“Permit”) issued by the Division of Air Quality (“DAQ”) of the West Virginia Department of Environmental Protection (“WVDEP” or “Department”) on April 29, 2025, to Roxul USA Inc., dba Rockwool (“Roxul” or “Rockwool”), for the RAN Facility located in Ranson, Jefferson County, West Virginia, Plant Identification No. 03-54-037-00108 (“Facility”).<sup>1,2</sup> The Permit is attached as Exhibit 1 to this Petition.

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<sup>1</sup> Ex. 1, WVDEP, Permit to Operate Pursuant to Title V of the Clean Air Act, Issued to: ROXUL USA Inc., RAN Facility, R30-03700108-2025 (July 1, 2025) (“Permit”). *Also available at* [https://dep.wv.gov/daq/permitting/titlevpermits/Documents/July%202025/037-00108/FinalPermit\\_R30-03700108-2025.pdf](https://dep.wv.gov/daq/permitting/titlevpermits/Documents/July%202025/037-00108/FinalPermit_R30-03700108-2025.pdf). NOTE: A consolidated PDF File of all the Exhibits to this Petition is also available at <https://www.jeffersoncountyfoundation.org/wp-content/uploads/2025/09/JCF-Rockwool-Title-V-Petition-Exhibits-with-Public-Comment-Attachments.pdf>.

<sup>2</sup> While the Rockwool name does not appear on the Permit, Roxul has generally identified itself as “Roxul USA, Inc., dba ROCKWOOL” on the Title V permit applications submitted to WVDEP, and that is the name generally

As discussed below, EPA must object to the Rockwool Title V Permit because it fails to include all applicable requirements of the Clean Air Act, as well as clear and enforceable monitoring, testing, recordkeeping, and reporting requirements sufficient to assure compliance with all applicable requirements.

## I. PETITIONER

Jefferson County Foundation, Inc. is a 501(c)(3) non-profit organization that works strategically to address long-term issues facing the Eastern Panhandle of West Virginia. JCF supports and promotes effective and accountable government, sustainable development, environmental injustice, and the protection of health, heritage, and the environment in the Eastern Panhandle through litigation and regulatory advocacy under federal environmental statutes.

## II. FACILITY DESCRIPTION AND PERMITTING HISTORY

Rockwool's RAN Facility is a newly-constructed factory that "manufactures stone wool insulation (SIC – 3296) for building insulation, customized solutions for industrial applications, acoustic ceilings, and other applications."<sup>3</sup> As Rockwool has explained, the RAN facility is a first-of-its kind operation that utilizes "highly advanced, proprietary, fuel-flexible melting technology" that is not capable anywhere else in the industry.<sup>4</sup> WVDEP has identified multiple processes at the Facility with the potential to emit air pollutants, including "Raw Material

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used by the public, including JCF, when discussing the RAN Facility. *See, e.g.*, WVDEP, RAN Facility Application File, <https://dep.wv.gov/daq/permitting/titlevpermits/Documents/June%202024/037-00108/revise%20ROXUL%20Title%20V%20Application%20+%20IPR%20for%20web.pdf> ("Application File"), at PDF pages 547, 499, and 377. *See also* RTC, n. 3, *infra*, at 27 (explaining that in the 865-page PDF file on WVDEP's ApplicationXtender website results from "multiple entries [] combined to form one comprehensive Title V application that covers the period from May 20, 2022 when the initial application was submitted until the issuance of the Proposed Title V Permit").

<sup>3</sup> *See* Ex. 2, WVDEP, Response to Public Comments, R30-03700108-2025, ROXUL USA Inc., RAN Facility (June 5, 2025) ("RTC"), *also available at* <https://dep.wv.gov/daq/permitting/titlevpermits/Documents/July%202025/037-00108/R30-03700108-2025%20Response%20to%20Comments%206%205%202025.pdf>, at 3.

<sup>4</sup> Ex. 3, Rockwool Ransom Community Facebook Page Post (July 31, 2020).

Handling Sources; Melting Furnace; Wool Spinning, Curing, Cooling, and Cutting; Binder and De-Dust Oil Application and Storage; Stacking, Packing, and Unit Load; Recycling Plant; Miscellaneous operations and activities including boilers, heaters, a fire pump engine, and fuel storage; and paved haul roads and mobile work areas.”<sup>5</sup>

While the Facility has been in operation for less than 5 years, it has a complicated permitting history. On April 30, 2018, WVDEP issued Rockwool a major source new source review (“NSR”) prevention of significant deterioration (“PSD”) permit for the RAN Facility, No. R14-0037.<sup>6</sup> WVDEP’s issuance of a major source NSR PSD permit was based, in part, on the Facility’s potential to emit (“PTE”) more than 470 tons per year (“TPY”) of volatile organic compounds (“VOCs”) and more than 250 TPY of particulate matter (“PM”) from planned operation using both coal and natural gas to heat the melting furnace.<sup>7</sup> However, on March 4, 2020, Roxul informed WVDEP that it planned to operate of the Facility using only natural gas in the melting furnace, and on March 11, 2020, WVDEP acknowledged the planned change in operations and noted that all terms of PSD permit R14-0037 remained in effect.<sup>8</sup> Operations at the Facility began on May 22, 2021, and Rockwool submitted an initial Title V operating permit application in May 2022.<sup>9</sup>

Following Roxul’s announced change in operations, JCF submitted various letters and information to WVDEP and EPA regarding the Facility’s fuel switch and PSD permitting, and

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<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> Permit R14-0037 Preliminary Determination (March 8, 2018), [https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/R14-0037\\_Preliminary\\_Determination.pdf](https://dep.wv.gov/daq/Documents/March%202018%20Drafts%20and%20IPR/R14-0037_Preliminary_Determination.pdf), at 1 and 6 (“Coal (and occasionally petroleum coke - “pet coke”), along with natural gas, is used to provide energy to the Melting Furnace”).

<sup>8</sup> See Ex. 4, March 2020 Letters from Rockwool and WVDEP regarding fuel switch.

<sup>9</sup> RTC at 3.

JCF and others also met with those agencies to discuss their concerns.<sup>10</sup> Rockwool subsequently submitted an application to modify its NSR PSD permit in October 2022, which it amended in May 2023.<sup>11</sup> Rockwool's October 2022 application to modify its PSD permit included PTE estimates similar to those that accompanied the original PSD permit, including more than 471 TPY of VOCs and 250 TPY of total PM.<sup>12</sup> However, the May 2023 modification application dramatically reduced the Facility's PTE estimates, reducing the VOC PTE to 196.18 TPY and total PM PTE to 75.50 TPY based on various "permitting updates."<sup>13</sup>

WVDEP issued modification R14-0037A for the RAN Facility's NSR permit on November 16, 2023.<sup>14</sup> In issuing the NSR Modification Permit WVDEP determined that the requested changes decreased the facility's potential to emit to less than the major source thresholds and that RAN was no longer subject to the major source PSD requirements of 45 CSR 14.<sup>15</sup> While not directly acknowledged by WVDEP in the NSR or Title V permitting records for the RAN Facility, Modification Permit R14-0037A appears to be a synthetic minor source NSR permit because Rockwool relied, in part, on operational limits that resulted in VOC and PM

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<sup>10</sup> See, generally, Ex. 5, Letter from Cristina Fernandez, EPA Region 3, to Christine Wimer, JCF (Feb. 3, 2022), at 1-2 (summarizing JCF interactions with EPA and WVDEP).

<sup>11</sup> DAQ Permit Application from Roxul USA Inc. dba ROCKWOOL (received October 3, 2022), [https://dep.wv.gov/daq/permitting/Documents/Rockwool-RAN/037-00108\\_APPL\\_14-0037A.pdf](https://dep.wv.gov/daq/permitting/Documents/Rockwool-RAN/037-00108_APPL_14-0037A.pdf) ("October 2022 Modification Application"), and DAQ Permit Application from Roxul USA Inc. dba ROCKWOOL (received May 22, 2023), [https://dep.wv.gov/daq/permitting/Documents/Rockwool-RAN/037-00108\\_APPL\\_14-0037A%20Revised.pdf](https://dep.wv.gov/daq/permitting/Documents/Rockwool-RAN/037-00108_APPL_14-0037A%20Revised.pdf) ("May 2023 Modification Application").

<sup>12</sup> October 2022 Modification Application at PDF page 6.

<sup>13</sup> May 2023 Modification Application at PDF pages 5 and 6.

<sup>14</sup> WVDEP, Modification Permit R14-0037A, Roxul USA, Inc., RAN Facility, 031-00108 (Nov. 16, 2023) [https://dep.wv.gov/daq/permitting/Documents/Rockwool-RAN/037-00180\\_perm\\_R14-0037A.pdf](https://dep.wv.gov/daq/permitting/Documents/Rockwool-RAN/037-00180_perm_R14-0037A.pdf) ("NSR Modification Permit").

<sup>15</sup> RTC at 3.

emissions remaining below the PSD major source thresholds.<sup>16</sup> WVDEP included those operational limits in the final NSR Modification Permit.<sup>17</sup>

Thereafter, both Roxul and JCF brought administrative challenges to the modified NSR permit with the West Virginia Air Quality Board (“AQB”).<sup>18</sup> While those appeals were pending, WVDEP issued the RAN Facility’s draft Title V permit for public comment from May 22, 2024 through August 2, 2024.<sup>19</sup> JCF and others submitted comments during that period.<sup>20</sup> On August 8, 2024, after the close of the public comment period on the draft Title V permit, the AQB issued orders that granted in part and denied in part Roxul’s appeal and denied JCF’s challenges as a matter of law.<sup>21</sup> Roxul subsequently requested an administrative update to NSR Modification Permit R14-0037A to reflect the outcome of the AQB order, which resulted in WVDEP issuing NSR Modification Permit R14-0037B on September 5, 2024 and incorporating those changes into this final Title V Permit.<sup>22</sup>

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<sup>16</sup> May 2023 Modification Application at PDF pages 6 (noting the reductions in PTE) and 5 (providing the list of permitting updates that lead to those emission reductions, including reduction of the annual hours of operation of the mineral wool production facility and fleece application vents). *See also* WVDEP Response to Public Comments on Permit Modification R14-0037A (November 14, 2023), <https://dep.wv.gov/daq/permitting/Documents/Rockwool-RAN/CommentResponse.pdf> (“Modification Permit RTC”), at 4, Comment and Response #1 (noting that “Roxul did not submit” an analysis of its specific PTE calculations to WVDEP); WVDEP, *General Permit G70-D, Engineering Evaluation/Fact Sheet* (undated), <https://dep.wv.gov/daq/permitting/Documents/G70-D%20Final%20Docs/G70-D%20Fact%20Sheet%20v2.pdf> (“Synthetic minor’ permitting actions would include limitations on physical or operational capacity to remain below major stationary source thresholds.”).

<sup>17</sup> Modification Permit RTC at 9, Comment and Response #35 (acknowledging that conditions 4.1.4.e, 4.1.5.d, 4.1.6.d and 4.2.5 were added to the permit to address the need to “specifically limit[] hours of operation to the number of hours per year upon which annual [emission] calculations are based”).

<sup>18</sup> RTC at 3-4.

<sup>19</sup> *Id.* at 5.

<sup>20</sup> *Id.* at 5. *See also* Ex. 6, Letter from JCF, WV Chapter of the NAACP, and the Sierra Club West Virginia to WVDEP (Aug. 2, 2024) (“Public Comments”). NOTE: While these Public Comments were submitted by JCF and other groups, this Petition will generally refer to the August 2<sup>nd</sup> comments as JCF’s or Petitioner’s comments.

<sup>21</sup> RTC at 4.

<sup>22</sup> *Id.* at 4-5.

WVDEP submitted the proposed RAN Facility Title V Permit to EPA for review on June 6, 2025, and EPA's 45-day review period ended on July 21, 2025 without an EPA objection.<sup>23</sup> Thus, the 60-day public petition period on the Permit ends on September 19, 2025, and this Petition is timely.<sup>24</sup> As required, JCF is filing this Petition and Exhibits with the Administrator via the Central Data Exchange and providing copies via certified U.S. mail to WVDEP and Roxul.

### III. STANDARD OF REVIEW FOR TITLE V PETITIONS

Title V permits must include all federally enforceable requirements that apply to each major source of air pollution and must also assure compliance with those requirements.<sup>25</sup> Thus, Title V permits are the primary method for enforcing and assuring compliance with the pollution control requirements of the CAA.<sup>26</sup> One primary purpose of Title V is to “enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements,” thereby increasing source accountability and improving enforcement of CAA requirements.<sup>27</sup>

The Title V permitting authority must ensure that a proposed permit includes conditions sufficient “to assure compliance with all applicable requirements” of the Act.<sup>28</sup> “Applicable requirements” include any requirements of a federally enforceable state implementation plan

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<sup>23</sup> Ex. 7, EPA Region 3 Title V Operating Permit Public Petition Deadlines, Entry for Roxul USA, Inc., Permit No. R30-03700108-2025. Also available at <https://www.epa.gov/caa-permitting/title-v-operating-permit-public-petition-deadlines> (search for “Roxul”).

<sup>24</sup> *Id.* and 42 U.S.C. § 7661d(b)(2) (“If the [EPA] Administrator does not object in writing to the issuance of a permit...any person may petition the Administrator within 60 days after the expiration of the 45-day review period.”). While WVDEP informed JCF and other commenters that EPA had completed its review of the RAN Facility’s Title V Permit early and DAQ issued the Permit on July 1, 2025, see Ex. 8, those actions did not change the September 19, 2025 due date for petitions as mandated by CAA § 505(b)(2) and shown on the Region 3 petitions deadlines website.

<sup>25</sup> 42 U.S.C. § 7661c(a).

<sup>26</sup> 57 Fed. Reg. 32250, 32258 (July 21, 1992).

<sup>27</sup> *Id.* at 32251.

<sup>28</sup> 42 U.S.C. § 7661c(a) and (c).

(“SIP”), any preconstruction permit requirements, and various EPA CAA rules that apply to emission units at the source.<sup>29</sup> In addition, a Title V permit must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit.<sup>30</sup> Title V regulations require that the permitting authority’s rationale for any proposed permit conditions be clear and documented in the permit record.<sup>31</sup> EPA has explained “permitting authorities have a responsibility to respond to significant comments” received on a proposed permit as part of the Title V permit record.<sup>32</sup>

EPA must object to any Title V permit that fails to include all applicable CAA requirements or assure compliance with those requirements.<sup>33</sup> If EPA does not object to a Title V permit, “any person may petition the Administrator within 60 days after the expiration of the Administrator’s 45-day review period to make such objection.”<sup>34</sup> The Administrator “shall issue an objection” if the petitioner demonstrates “that the permit is not in compliance with the requirements of [the CAA], including the requirements of the applicable implementation plan.”<sup>35</sup> The Administrator “shall grant or deny such petition within 60 days after the petition is filed.”<sup>36</sup>

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<sup>29</sup> 40 C.F.R. § 70.2 (definition of “applicable requirement”). See also *In the Matter of Pacific Coast Building Products, Inc., Permit No. A00011, Clark County, NV* (Dec. 10, 1999), [https://www.epa.gov/sites/default/files/2015-08/documents/pacific\\_coast\\_decision1999.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/pacific_coast_decision1999.pdf) at 7 (“applicable requirements include the requirement to obtain preconstruction permits that comply with preconstruction review requirements under the Act, EPA regulations, and State Implementation Plans”).

<sup>30</sup> 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1).

<sup>31</sup> 40 C.F.R. § 70.7(a)(5).

<sup>32</sup> *In the Matter of CITGO Refining and Chemicals Co., L.P., West Plant, Corpus Christi, TX* (May 28, 2009), [https://www.epa.gov/sites/default/files/2015-08/documents/citgo\\_corpuschristi\\_west\\_response2007.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/citgo_corpuschristi_west_response2007.pdf) (“*CITGO Order*”), at 7.

<sup>33</sup> 40 C.F.R. § 70.8(c); 42 U.S.C. § 7661d(b).

<sup>34</sup> 42 U.S.C. § 7661d(b)(2) (emphasis added); 40 C.F.R. § 70.8(d).

<sup>35</sup> 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).

<sup>36</sup> 42 U.S.C. § 7661d(b)(2).

#### IV. GROUNDS FOR OBJECTION

EPA must object to Rockwool’s Title V Permit because it fails to include and/or assure compliance with all CAA applicable requirements for the RAN facility. As explained more fully below, the Permit:

- (1) fails to include adequate monitoring, testing, recordkeeping, and reporting requirements to assure compliance with the VOC and other emissions limits in Conditions 4.1.4.a and 4.1.5.a of the Permit;
- (2) fails to include the applicable NESHAP Subpart DDD operation, maintenance, and monitoring plan, and
- (3) fails to include clear and enforceable terms to address applicable requirements of NESHAP Subparts DDD and ZZZZ.

For each of these deficiencies, the Petition addresses the specific petition requirements set forth in EPA’s Title V regulations. As EPA has explained, these rules require Title V petitions to identify: “(1) the specific grounds for an objection, citing to a specific permit term or condition where applicable; (2) the applicable requirement as defined in 40 C.F.R. § 70.2, or requirement under part 70, that is not met; and (3) an explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement,”<sup>37</sup> as well as where the issue was raised in public comments and how the permitting authority (i.e., WVDEP) addressed those comments in issuing the Permit.<sup>38</sup>

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<sup>37</sup> *In the Matter of Valero Energy Partners, L.P., Valero Houston Refinery – Tank Farm* (July 18, 2025), [https://www.epa.gov/system/files/documents/2025-07/valero-tank-farm-order\\_7-18-25.pdf](https://www.epa.gov/system/files/documents/2025-07/valero-tank-farm-order_7-18-25.pdf), at 3 (citing 40 C.F.R. § 70.12(a)(2)(i)-(iii)).

<sup>38</sup> 40 C.F.R. § 70.12(a)(2)(v)-(vi).

**A. The Permit fails to include adequate monitoring, testing, recordkeeping, and reporting requirements sufficient to assure compliance with the VOC, CO, and NOx emission limits in the Permit.**

The CAA requires that each Title V permit “shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions.”<sup>39</sup> As the relevant permitting authority, WVDEP has the responsibility “to ensure that the [T]itle v permit ‘set[s] forth’ monitoring to assure compliance with all applicable requirements.”<sup>40</sup> Further, any emission limit in a Title V permit must be enforceable as both a legal and practical matter. For a limit to be enforceable as a practical matter, a permit must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with the limit.<sup>41</sup> This requires every emission limit to be (a) “accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold... whether by restricting emissions directly or through restricting specific operating parameters,” and (b) supported by monitoring, recordkeeping, and reporting requirements “sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action.”<sup>42</sup> These requirements are especially important when the emission limits in the underlying NSR permit were created as synthetic minor limits to limit a source’s potential to emit (“PTE”) pollutants below certain thresholds to avoid major source permitting requirements.<sup>43</sup>

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<sup>39</sup> 42 U.S.C. § 7661c(c); *see also* 40 C.F.R. § 70.6(c)(1).

<sup>40</sup> *Sandy Creek Order* at 12 (quoting 42 U.S.C. § 7661c(c)).

<sup>41</sup> *See, e.g., In the Matter of Hu Honua Bioenergy Facility, Pepeekeo, HI* (Feb. 7, 2014), [https://www.epa.gov/sites/default/files/2015-08/documents/hu\\_honua\\_decision2011.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/hu_honua_decision2011.pdf) (“*Hu Honua Order*”), at 10.

<sup>42</sup> *In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC*, (Apr. 8, 2002), [https://www.epa.gov/sites/default/files/2015-08/documents/masada-2\\_decision2001.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/masada-2_decision2001.pdf) (“*Pencor-Masada Order*”), at 7.

<sup>43</sup> *See, generally, In the Matter of Yuhuang Chemical, Inc.* (Aug. 31, 2016), [https://www.epa.gov/sites/default/files/2016-09/documents/yuhuang\\_response2015\\_0.pdf](https://www.epa.gov/sites/default/files/2016-09/documents/yuhuang_response2015_0.pdf) (“*Yuhuang Chemical Order*”), at 13-15 and extensive EPA Title V orders cited therein (describing the need for enforceable permit terms to

As EPA explains, the Part 70 rules address the CAA requirement that all Title V permits include adequate monitoring, and contain three pathways to satisfy those monitoring requirements:

- (1) The Title V permit must properly incorporate monitoring requirements contained in applicable requirements;<sup>44</sup>
- (2) If an applicable requirement does not contain periodic monitoring, the Title V permit must include periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of compliance with the permit;<sup>45</sup> and
- (3) If an applicable requirement contains periodic monitoring that is insufficient to assure compliance with permit terms and conditions, the Title V permit must include supplemental monitoring to assure such compliance.<sup>46</sup>

In addition, “the time period associated with monitoring or other compliance assurance provisions must bear a relationship to the limits with which the monitoring assures compliance.”<sup>47</sup>

Determining whether monitoring contained in a Title V permit is sufficient to assure compliance with any term or condition is a context-specific, case-by-case inquiry.<sup>48</sup> To aid permitting authorities and the public in this fact-specific exercise, EPA identifies several factors that permitting authorities “may consider as a starting point in determining appropriate monitoring” for a facility, including (but not limited to) the variability of emissions and the

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limit a source’s potential to emit and sufficient monitoring, recordkeeping, and reporting to assure compliance with those limits).

<sup>44</sup> *In the Matter of Shell Deer Park Chemical Plant* (September 24, 2015), [https://www.epa.gov/sites/default/files/2015-09/documents/dpr\\_response2014.pdf](https://www.epa.gov/sites/default/files/2015-09/documents/dpr_response2014.pdf) (“*Deer Park Order*”), at 18 (citing 40 C.F.R. § 70.6(a)(3)(i)(A, B), (c)(1)).

<sup>45</sup> *Id.* citing 40 C.F.R. § 70.6(a)(3)(i)(B).

<sup>46</sup> *Id.* citing 40 C.F.R. § 70.6(c)(1) and other EPA Title V Petition Orders.

<sup>47</sup> *In the Matter of United States Steel Corporation, Clairton Coke Works Permit No. 0052-OP22* (Sept. 18, 2023), [https://www.epa.gov/system/files/documents/2023-10/us-steel-clairton-order\\_9-18-23.pdf](https://www.epa.gov/system/files/documents/2023-10/us-steel-clairton-order_9-18-23.pdf) (“*Clairton Order*”), at 9; *see also* 40 C.F.R. § 70.6(a)(3)(i)(B).

<sup>48</sup> *Clairton Order* at 9.

likelihood of a violation of the requirements.<sup>49</sup> EPA explains that “the rationale for the selected monitoring requirements must be clear and documented in the permit record.”<sup>50</sup> As explained below, the final Permit issued by WVDEP does not contain requirements to assure compliance with specific emission limits contained in Permit Conditions 4.1.4.a and 4.1.5.a.

**a. VOC Emission Limits in Permit Conditions 4.1.4.a and 4.1.5.a**

1. Specific Grounds for Objection, Including Citation to Permit Terms and Part 70 Requirements Not Met

Conditions 4.1.4.a and 4.1.5.a of the Permit contain numeric limits for most of the VOC emissions from the RAN Facility.<sup>51</sup> Specifically, the Permit contains VOC emissions limits of:

- 0.31 pounds per hour (“PPH”) and 1.29 TPY from the Melting Furnace, Emission Unit IMF01,<sup>52</sup> and
- 44.66 PPH and 187.55 TPY from the Gutter Exhaust, Spinning Chamber, Curing Oven Hoods, Curing Oven, and Cooling Section as emitted from the Wet Electrostatic Precipitator (“WESP”), which is referred to collectively in the Permit and in this Petition as Emission Unit HE01.<sup>53</sup>

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<sup>49</sup> *Id.*

<sup>50</sup> *CITGO Order* at 7–8 (granting petition because permitting authority “did not articulate a rationale for its conclusions that the monitoring requirements... are sufficient to assure compliance”); *see also* 40 C.F.R. § 70.7(a)(5).

<sup>51</sup> The Permit also contains VOC emission limits for the Fuel Burning Units, Storage Tanks, and Emergency Fire Pump Engine in Conditions 4.1.8.b, 4.1.9, and 4.1.10, respectively, of less than 0.15 TPY. This Petition does not address raise objections regarding monitoring of these VOC emission limits given the exceedingly small amount of VOC emissions they address. While Condition 4.1.6.a contains a combined VOC and HAPs emission limit of 6.85 TPY for the Fleece Application operations, that limit is addressed by specific monitoring requirements in Condition 4.2.7 and thus not raised as a claim in this Petition. *See* Permit at 39, 54-55.

<sup>52</sup> Permit at 32.

<sup>53</sup> *Id.* at 37.

These numerical VOC limits are applicable requirements arising from NSR Modification Permit R14-0037A.<sup>54</sup> As synthetic minor limits, they are also applicable requirements of the CAA and the WV SIP, since they are used to avoid federal and state major source NSR permitting requirements.<sup>55</sup>

The Permit is deficient because it does not contain monitoring, testing, recordkeeping, and reporting sufficient to assure compliance with the specific numeric VOC emission limits in Conditions 4.1.4.a and 4.1.5.a. The monitoring requirements in Section 4.2 of the Permit do not contain any monitoring requirements that specifically address compliance with these VOC emission limits.<sup>56</sup> In addition, the Recordkeeping Requirements in Section 3.4 of the Permit only require Rockwool to keep records of *monitoring* information and supporting data, of which there is none for the VOC emissions.<sup>57</sup> Likewise, the Reporting Requirements of Permit Section 3.5.1 only require submission of the annual compliance certification (i.e., Rockwool’s statements of their compliance with Permit conditions), semi-annual monitoring reports (i.e., reports of “any required monitoring” and instances of permit deviation), and reports of specific types of permit deviations,<sup>58</sup> so it is not clear that Rockwool must submit *any* information regarding the VOC emissions from Unit IMF01 and Unit HE01.

The Permit is also deficient because WVDEP’s accompanying record does not provide a clear rationale showing that the Permit requirements currently in place are sufficient to determine compliance with these numeric VOC emission limits, as explained below.

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<sup>54</sup> NSR Modification Permit at 23, Condition 4.1.4.a, and 26, Condition 4.1.5.a. *See also* 40 C.F.R. § 70.2 (definition of “applicable requirement”).

<sup>55</sup> *See also* 40 C.F.R. § 70.2 (definition of “applicable requirement”) and *Pacific Coast Order* at 7.

<sup>56</sup> *See, generally*, Permit at 53-60 (not containing any requirements relating to these VOC emission limits).

<sup>57</sup> Permit at 17, Conditions 3.4.1 and 3.4.2.

<sup>58</sup> *Id.* at 18-19, Conditions 3.5.4 and 3.5.5

## 2. Issue Raised in Public Comment

The lack of adequate monitoring, testing recordkeeping, and reporting for numerous emissions limits was raised in Section 5 of JCF's public comments.<sup>59</sup> Comments 5.c and 5.d clearly addressed the lack of monitoring, testing, recordkeeping, and reporting necessary to assure compliance with the VOC limits, stating "Commenters cannot locate any conditions in the Draft Permit section 4.2 Monitoring Requirements (or elsewhere) that can be used to assure compliance" with the PPH and TPY emission limits contained in Conditions 4.1.4.a and 4.1.5.a.<sup>60</sup> With regard to these Conditions' VOC emissions limits in particular, the public comments discussed how NSR Modification Permit R14-0037A was a synthetic minor NSR permit that limited PTE to below the major source emission thresholds, emphasized the necessity of adequate monitoring for such limits, and noted that the Permit did not contain monitoring "necessary to assure compliance with the synthetic minor permitting requirements for this source."<sup>61</sup>

JCF also raised the issue of how the Permit did not clearly identify the "required monitoring" and resulting reporting of any emissions information, which would include VOC emissions.<sup>62</sup>

Thus, the public comments clearly raised the issue that Rockwool's Title V Permit did not include sufficient monitoring, recordkeeping, and reporting to assure compliance with the numerical PM emission limits in Conditions 4.1.4.a and 4.1.5.a.

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<sup>59</sup> Public Comments at 13.

<sup>60</sup> *Id.* at 15-16.

<sup>61</sup> *Id.* at 4, 14, and 16.

<sup>62</sup> Public Comments at 14-15, Comment 5.a. and 5.b.

### 3. Analysis of WVDEP's Response

Since the NSR Modification Permit containing the applicable VOC emission limits does not contain VOC-specific monitoring provisions,<sup>63</sup> the “Title V permit must include periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of compliance with the permit.”<sup>64</sup> Nothing in the final Permit or the Department’s Response to Comments (“RTC”) fulfills that requirement as it applies to the hourly and yearly VOC emission limits in Conditions 4.1.4.a and 4.1.5.a, as explained below.

WVDEP generally responded to Petitioner’s comments on inadequate monitoring, recordkeeping, and reporting of emission limits by noting that under unspecified EPA regulations, “compliance is demonstrated as a multi-pronged approach with more than one method (i.e., monitoring, testing, recordkeeping, or reporting) being used to demonstrate compliance.”<sup>65</sup> WVDEP pointed to EPA’s *Union Carbide Order*, explaining:<sup>66</sup>

In EPA’s order on Petition No. III-2023-16, for the Union Carbide Corporation Institute Facility’s Title V permit, EPA described five factors permitting authorities may consider as a starting point in determining appropriate monitoring for a particular facility. These are: (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring, process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities.

<sup>63</sup> See NSR Modification Permit at 37, Section 4.2 (similar provisions to Section 4.2 of the Title V Permit and no provisions specific to VOC emissions from Emission Units IMF01 and HE01).

<sup>64</sup> *Deer Park Order* at 18, citing 40 C.F.R. § 70.6(a)(3)(i)(B). See also *Clairton Order* at 9.

<sup>65</sup> RTC at 32-33.

<sup>66</sup> RTC at 32, citing *In the Matter of Union Carbide Corporation, Union Carbide Institute Facility*, Permit No. R30-039000005-2023 (May 4, 2024), <https://www.epa.gov/system/files/documents/2024-06/union-carbide-petition-order-5-24-24.pdf> (“*Union Carbide Order*”).

The RTC then provided pages of tables of WVDEP’s five-factor analysis from the *Union Carbide Order* to specific emission limits and Permit terms for the RAN Facility.<sup>67</sup>

Regarding the emission limits in Conditions 4.1.4.a and 4.1.5.a generally, WVDEP explained that “[c]ompliance with the [ ] emission limits are derived from several underlying sources and compliance is monitored using several methods,” and then provided a table of “Five Factor Monitoring Analysis” for each pollutant.<sup>68</sup> For the VOC emission limits, the RTC notes that NSR Modification Permit R14-0037A established these VOC emissions limits “based on a maximum concentration value developed using stack test performance data for emission point [ ] at maximum heat input capacity and maximum design capacity of the associated emission units...when operating at maximum production capacity,” and asserted that even with variability in VOC emissions, the “likelihood of violating the emission limits is low.”<sup>69</sup> However, the RTC does not contains any specific analysis of the impact of variability on VOC emissions, much less a showing that operating at maximum production capacity resulted in the highest VOC emissions at these specific units; nor it is clear that WVDEP could provide such an analysis.<sup>70</sup> WVDEP then provided information from January 2022 performance testing that showed VOC emissions below the hourly permit limits and reports of actual emissions in 2022 and 2024 below the yearly VOC limits,<sup>71</sup> but it’s not clear that this information is relevant since past emissions information is not part of the five factor analysis. The five factor analysis in the RTC for the VOC emission limits in Conditions 4.1.4.a and 4.1.5.a also noted the lack of add-on controls but use of good

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<sup>67</sup> RTC at 33 (explaining how responses to comments 5c-5f contained “more details on the monitoring for specific emission units/pollutant”) and 34-125.

<sup>68</sup> RTC at 34 *et seq.* and 55 *et seq.*

<sup>69</sup> RTC at 44 and 63.

<sup>70</sup> See Ex. 9, JCF Comments on NSR Modification Permit (Oct. 20, 2023) at 18, Comment 9 (explaining that maximum production capacity (or load) is only likely to result in maximum emissions of PM, NO<sub>x</sub>, and SO<sub>2</sub>, while maximum emissions for other pollutants such as CO and VOC are likely to occur at lower loads).

<sup>71</sup> RTC at 44-45 and 63.

combustion practices to controls VOCs at the Melting Furnace and use of an afterburner at the Unit HE01.<sup>72</sup> Finally, the Department provided a list of other required permit conditions at the Facility, and noted that the Permit’s monitoring, testing, reporting, and recordkeeping requirements are similar to those found in existing permits for similar facilities.<sup>73</sup>

While WVDEP provided a lot of information in the RTC that attempts to address the *Union Carbide* factors, the Permit and accompanying RTC lack two key analyses from the *Union Carbide Order*. First, the Permit still fails to assure compliance with the VOC limits, because “to the extent that specific permit terms (e.g., monitoring or record keeping provisions) are relied upon to assure compliance with emission limits, the Permit should clearly state the connection between the compliance assurance provisions and the associated limits.”<sup>74</sup> In this case, the RTC responses included long lists of existing requirements in the Permit, but WVDEP did not make any changes to the Permit itself to identify those specific terms that the Department, EPA, or the public should use to determine compliance with the VOC (and other) emission limits in Conditions 4.1.4.a and 4.1.5.a. Second, even if WVDEP had modified the Permit in that way, the RCT fails to “explain *how* those requirements assure compliance with the relevant [VOC] limits.”<sup>75</sup> The five-factor analysis in the RTC contains a list of other things that the RAN Facility is “already required” to do under Permit, but it’s not clear how those requirements relate to VOC emissions or compliance with the Permit’s hourly and yearly VOC emission limits.<sup>76</sup> In fact, some of them clearly do not. For example, WVDEP includes “Records of Monitoring (condition 4.4.1)” and reporting of “deviations from permitted monitoring

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<sup>72</sup> *Id.* at 45 and 63.

<sup>73</sup> *Id.* at 45-46 and 63-65.

<sup>74</sup> *Union Carbide Order* at 12. *See also* extensive EPA orders cited therein.

<sup>75</sup> *Id.* (emphasis added).

<sup>76</sup> RTC at 45 and 63-65.

parameters (condition 3.5.8)” in its VOC analysis for Conditions 4.1.4.a and 4.1.5.a.<sup>77</sup> However, as explained above, there are *no* requirements that address those VOC emission limits in the monitoring section of the Permit (Section 4.2), and thus there are no VOC monitoring records to retain under Condition 4.4.1 and no deviations of such requirements that Rockwool must report under Condition 3.5.8.

Likewise, the Department’s five-factor analysis of VOC emissions in the RTC points to use of an afterburner at Emission Unit HE01 as another required condition that can assure compliance with the VOC emission unit.<sup>78</sup> WVDEP explains that the “afterburner must comply with the requirements of 40 C.F.R. 63 Subpart DDD” and lists the various conditions and associated recordkeeping and reporting for that rule.<sup>79</sup> However, these requirements are inadequate to assure compliance with the VOC emission limits because the Permit does not include the plan containing the specific operation and monitoring requirements related to afterburner use at this Facility under Subpart DDD and does not require recordkeeping and reporting of the VOC emissions, as explained below.<sup>80</sup>

In addition, the Department’s five-factor analysis also points to performance tests in Conditions 4.3.2, 4.3.3, and 4.3.5 for IMF01 and Conditions 4.3.2 and 4.3.5 for HE01, but these Permit Conditions neither assure on-going compliance with the hourly and annual VOC emission limits nor provide a practical method for enforcing them.<sup>81</sup> Elsewhere in the RTC, in response to the public comments about the adequacy of the performance stack testing, the Department emphasizes that the stack tests are “testing” and not “monitoring” requirements.<sup>82</sup> WVDEP also

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<sup>77</sup> *Id.* at 45 and 64.

<sup>78</sup> *Id.* at 63-64.

<sup>79</sup> *Id.* at 64.

<sup>80</sup> *See, infra*, Section B. *See also* n. 99 and related discussion.

<sup>81</sup> *Id.*

<sup>82</sup> RTC at 125.

explains that Condition 4.3.2 is a “one-time test” with additional testing required under Condition 4.3.3 at a frequency of 1 to 3 years “based on the results” of that one-time and subsequent testing, while Condition 4.3.5 is simply the methods that apply to that testing.<sup>83</sup>

Contrary to WVDEP’s assertions, it is not clear how these performance testing requirements help assure continuous compliance with the hourly and yearly VOC emission limits in Conditions 4.1.4.a and 4.1.5.a. First, it is not clear how any Permit requirements for recordkeeping and reporting of “monitoring” information would apply to the stack testing found in the Section “4.3. Testing Requirements” of the Permit. Second, it is not clear how the identification of specific test methods in Condition 4.3.5 can assure compliance with the specific VOC limits in the Permit. Third, it is not clear how these tests provide any assurance of compliance with the yearly VOC limit since the Permit specifies that the one-time stack test in Condition 4.3.2 and any subsequent one-to-three year testing under Condition 4.3.2 are specifically used to identify compliance with the *hourly* VOC limits for IMF01 and HE01.<sup>84</sup>

In addition, WVDEP has simply failed to explain how emissions testing of hourly VOC emissions from IMF01 and HE01 every 3 years assures on-going compliance with both the hourly and yearly VOC emission limits in Conditions 4.1.4.a and 4.1.5.a. WVDEP explains that Rockwool “is only testing” VOCs every 3 years if the last performance test shows that emissions are less than 90% of the weight emission standard.<sup>85</sup> But since no other emissions monitoring or other testing of VOC emissions is required under the Permit, the RAN facility could be violating these VOC limits for two years or more before WVDEP, EPA, or the public was aware of the

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<sup>83</sup> RTC at 125. *See also* Permit at 60-62, Conditions 4.3.2, 4.3.3, and 4.3.5.

<sup>84</sup> Permit at 61-62,

<sup>85</sup> RTC at 128.

problem, and even then, it would be difficult to determine how long the violations had been occurring in order to “take appropriate enforcement action.”<sup>86</sup>

In fact, EPA has already addressed similar compliance assurance deficiencies in the *Montgomery County* Title V Order.<sup>87</sup> EPA found that *annual* stack testing paired with other measures that “lack specific instructions on how [those measures] might be used to ensure continuous compliance with” an hourly emission limit were insufficient to address the Title V monitoring requirements.<sup>88</sup> In that Order, EPA found that the petitioner demonstrated that a Title V permit was inadequate because the permit only specifically identified stack testing as the compliance mechanism for the hourly limit, while other “countermeasures” were not clearly identified as compliance mechanisms for the hourly limit and/or unenforceable.<sup>89</sup> EPA found that the actual Title V permit in *Montgomery County* did not “clearly identify” which other measures would be used to determine compliance with the permit’s hourly emission limit.<sup>90</sup> EPA also noted that it was not clear how particular results of those other measures “would amount to a permit violation.”<sup>91</sup>

As explained above, it is similarly unclear how the long list of “already required” Permit provisions identified by the Department in the RTC would be used to determine compliance with or a violation of the hourly and yearly VOC emission limits at the RAN Facility. In addition, the RAN Facility Permit only requires relevant stack testing every three years, which is even less frequent than the testing found to be insufficient in the *Montgomery County Order*. WVDEP’s

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<sup>86</sup> *Pencor-Masada Order* at 7.

<sup>87</sup> *In the Matter of Montgomery County Resource Recovery Facility*, Pet. No. III-2019-2 (Dec. 11, 2020), [https://www.epa.gov/sites/default/files/2020-12/documents/montgomery\\_response2019.pdf](https://www.epa.gov/sites/default/files/2020-12/documents/montgomery_response2019.pdf) (“*Montgomery County Order*”).

<sup>88</sup> *Id.* at 10.

<sup>89</sup> *Id.* at 9-11.

<sup>90</sup> *Id.* at 10.

<sup>91</sup> *Id.*

reliance on a performance test up to every 3 years at the RAN Facility is not reasonable because past performance does not assure future compliance, especially for a first-of-its-kind Facility such as this.<sup>92</sup> For the reasons discussed above, the Rockwool Title V is similarly flawed to the Title V permit addressed in the *Montgomery County Order* and must be revised.

Furthermore, the RTC's reliance on past stack testing results and generalized assertions about the "likelihood" of compliance cannot substitute for the periodic, enforceable monitoring required by Part 70. Intermittent performance tests and historical data do not assure ongoing compliance, particularly where emissions are variable or dependent on operating parameters that can change over time.<sup>93</sup> The Clean Air Act requires Title V permits to establish monitoring and reporting that provide representative data to demonstrate compliance throughout the permit term.<sup>94</sup> The Permit lacks enforceable monitoring of VOC emissions from IMF01 and HE01 during periods representative of these unit's hourly and annual emissions, making it impossible for WVDEP, EPA, and the public to determine whether the VOC limits in Conditions 4.1.4.a and 4.1.5.a are being met on an ongoing basis.

Finally, while these deficiencies alone render the Rockwool Title V Permit inadequate to assure compliance with the VOC limits Conditions 4.1.4.a and 4.1.5.a, they are especially problematic here, where the VOC emission limits in the NSR Modification Permit appear to be synthetic minor limits.<sup>95</sup> WVDEP's responses on the adequacy of monitoring, testing, recordkeeping, and reporting for emissions generally and for the specific VOC limits in

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<sup>92</sup> See n. 4, *supra*, and related discussion.

<sup>93</sup> See *In the Matter of Consolidated Edison Co. of New York, Inc., 74<sup>th</sup> St. Station*, Petition No.: II-2001-02 (Feb. 19, 2003), [https://www.epa.gov/sites/production/files/2015-08/documents/con\\_edison\\_decision2001.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/con_edison_decision2001.pdf) ("*ConEd 74th St. Order*"), at 7-8 (finding stack testing at five-year intervals inadequate where operating variables can impact pollution emissions).

<sup>94</sup> *In re Midwest Generation, LLC Fisk Generating Station*, Petition No. V-2004-1 (March 25, 2005), [https://www.epa.gov/sites/default/files/2015-08/documents/midwest\\_generation\\_fisk\\_decision2004.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/midwest_generation_fisk_decision2004.pdf) ("*Midwest Gen Order*"), at 6 (citing 40 C.F.R. § 70.6 (a)(3)(i)(B)).

<sup>95</sup> Public Comments at 4, 14, and 16.

Conditions 4.1.4.a and 4.1.5a does not even address this point.<sup>96</sup> While the Permit contains the limits on the annual hours of operation for the melting furnace and fleece application process as contained in the NSR Modification Permit,<sup>97</sup> those limits cannot assure that emissions remain below NSR major source permitting thresholds without accompanying monitoring requirements to verify the VOC emissions that occur during those periods. Overall, the Department generally fails to recognize that if the monitoring methods in underlying NSR permits are inadequate, as they are here, the Title V Permit must include *additional* monitoring requirements to assure compliance with those limits, especially any synthetic minor limits.<sup>98</sup>

WVDEP also fails to adequately address JCF's public comments regarding inadequate reporting of VOC emission information. The Department asserts that the Permit contains adequate reporting, noting that "[s]ince any required monitoring has been specified in the monitoring sections of the Title V Permit, the semi-annual monitoring reports should include all of these conditions."<sup>99</sup> However, this completely ignores the key issue raised by Petitioner – that the Permit's monitoring provisions in Condition 4.2 do not include *any* specific monitoring of VOC emissions, and thus there are no requirements to report VOC emissions in Section 3 of the Permit.<sup>100</sup> The RTC also falsely asserts that "[u]nder condition 3.5.6, ROXUL has to include all monitoring *and data* required by the permit."<sup>101</sup> Even if there was some relevant hourly or

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<sup>96</sup> See, generally, RTC at 31-74 (summarizing and addressing Public Comments 5.a. – 5.d.; "synthetic" , "PTE limit," and similar phrases do not appear).

<sup>97</sup> See Permit at 36 and 40, Conditions 4.1.4.e and 4.1.6.d.

<sup>98</sup> *Deer Park Order* at 18 (citing 40 C.F.R. § 70.6(c)(1) and other EPA Title V Petition Orders). Compare with Public Comments at 18, Comment 5.i., and RTC at 128 (referring to the lack of consideration of NSR permitting decisions in discussing the adequacy of requiring VOC performance testing every three years). See also RTC at 23 (appearing to confuse the need for supplemental monitoring of NSR synthetic minor limits in a Title V permit with the requirements for issuing a synthetic minor Title V permit).

<sup>99</sup> RTC at 33.

<sup>100</sup> Public Comments at 14-15, Comment 5.a. and 5.b. See also Permit at 53-60 (not containing any requirements to monitor VOC emission limits under Conditions 4.1.4.a and 4.1.5.a ).

<sup>101</sup> RTC at 33 (emphasis added).

yearly VOC emissions data that was collected from these emission units, Condition 3.5.6 only requires submission of “required monitoring” and does not mention any other “data.”<sup>102</sup> WVDEP also emphasizes that Rockwool must report all “deviations” in the annual compliance certification and explains how the monitoring reports, deviation reports, and compliance certifications are available on-line.<sup>103</sup> However, without any requirements to monitor VOC emissions on an hourly or yearly basis, it is not clear how Rockwool could find, much less report, deviations of the VOC emission limits or how WVDEP, EPA, and the public can verify Rockwool’s assertions of compliance with them. Thus, the Permit fails to include monitoring, recordkeeping, and reporting requirements “sufficient to enable regulators and citizens to determine whether” the hourly and annual VOC emission limits in Conditions 4.1.4.a and 4.1.5a “ha[ve] been exceeded and, if so, to take appropriate enforcement action,” as required by the CAA.<sup>104</sup>

As explained above, WVDEP failed to adequately respond to Petitioner’s public comments and demonstrate that the Permit contains adequate and enforceable monitoring, testing, recordkeeping, and reporting necessary to assure compliance with the hourly and yearly VOC emission limits for units IMF01 and HE01. Accordingly, EPA must grant this Petition on this issue and either direct WVDEP to revise the Permit to include supplemental monitoring to assure compliance with the hourly and yearly VOC emission limits contained in Conditions 4.1.4.a and 4.1.5.a, or, at a minimum, require WVDEP to explain fully how the current Permit provisions assure continuous, enforceable compliance with these numeric emission limits.

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<sup>102</sup> Permit at 19.

<sup>103</sup> RTC at 33.

<sup>104</sup> *Pencor-Masada Order* at 7. *See also Yuhuang Chemical Order* at 14 (explaining that Title V permit “must include sufficient terms and conditions such that the source cannot lawfully exceed the [PTE] limit”).

**b. CO and NOx Emission Limits in Permit Condition 4.1.5.a**

1. Specific Grounds for Objection, Including Citation to Permit Terms and Part 70 Requirements Not Met

In addition to the VOC emissions limits discussed above, Condition 4.1.5.a of the RAN Facility's Title V Permit contains numeric emission limits for many other pollutants, including carbon monoxide ("CO") and oxides of nitrogen ("NOx").<sup>105</sup> Specifically, Permit Condition 4.1.5.a contains the following limits for Emission Unit HE01 (i.e., the Gutter Exhaust, Spinning Chamber, Curing Oven Hoods, Curing Oven, and Cooling Section as emitted by the WESP):

- 9.82 PPH and 41.24 TPY of CO,<sup>106</sup> and
- 1.57 PPH and 6.60 TPY of NOx.<sup>107</sup>

These CO and NOx emission limits are applicable requirements arising from NSR Modification Permit R14-0037A.<sup>108</sup>

The Permit is deficient because it does not contain monitoring, testing, recordkeeping, and reporting sufficient to assure compliance with these the CO and NOx emission limits in Condition 4.1.5.a. While Section 4.2 of the Permit contains monitoring requirements related to the continuous emission monitors ("CEMS") for CO and NOx emissions from Melting Furnace (IMF01) under Condition 4.1.4.a, there are no monitoring requirements in Section 4.2 that address compliance with CO and NOx emissions from Emission Unit HE01.<sup>109</sup> As explained above, this lack of specific monitoring requirements means that the Recordkeeping Requirements

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<sup>105</sup> The Permit contains emission limits for other pollutants in Condition 4.1.5.a, which JCF is not raising as claims in this Petition. However, should EPA grant our Petition regarding the claims related to VOC, CO, and NOx emissions, Petitioner encourages EPA to review the rest of the Permit and raise similar objections as warranted.

<sup>106</sup> Permit at 36.

<sup>107</sup> *Id.*

<sup>108</sup> NSR Modification Permit at 26-27, Condition 4.1.5.a. *See also* 40 C.F.R. § 70.2 (definition of "applicable requirement").

<sup>109</sup> *See, generally*, Permit at 53-60 (not containing any requirements relating to the emission limits).

in Section 3.4 of the Permit also do not apply to CO and NO<sub>x</sub> emissions from Emission Unit HE01, which applies only to records of *monitoring* information.<sup>110</sup> Likewise, the Reporting Requirements of Permit Section 3.5.1 only require submission of the annual compliance certification (i.e., Rockwool’s statements of their compliance with Permit conditions), semi-annual monitoring reports (i.e., reports of “any required monitoring” and instances of permit deviation), and reports of specific types of permit deviations,<sup>111</sup> so it is not clear that Rockwool must submit any specific monitoring information regarding CO and NO<sub>x</sub> emissions from Emission Unit HE01.

The Permit is also deficient because the Department’s record does not provide a clear showing that the Permit requirements currently in place are sufficient to determine compliance with these numeric CO and NO<sub>x</sub> emission limits, as explained below.

## 2. Issue Raised in Public Comment

The lack of adequate monitoring, recordkeeping, and reporting for numerous emissions limits was raised by JCF in Section 5 of their public comments.<sup>112</sup> Comment 5.d clearly stated raised the lack of monitoring, recordkeeping, and reporting necessary to assure compliance with the emission limits – including CO and NO<sub>x</sub> emissions – from Emission Unit HE01, stating “Commenters cannot locate any conditions in the Draft Permit section 4.2 Monitoring Requirements (or elsewhere) that can be used to assure compliance” with the PPH and TPY emission limits contained in Condition 4.1.5.a.<sup>113</sup> Petitioner explained that there Permit “is insufficient because it does not contain clear requirements for Rockwool to monitor emissions from [Emission Unit HE01] at the RAN facility and report them in format necessary to confirm

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<sup>110</sup> Permit at 17, Conditions 3.4.1 and 3.4.2.

<sup>111</sup> *Id.* at 18-19, Conditions 3.5.4 and 3.5.5.

<sup>112</sup> Public Comments at 13.

<sup>113</sup> *Id.* at 16.

the source’s continuous compliance with the PPH and TPY emission limits for each pollutant contained in Draft Permit Condition 4.1.5.a.”<sup>114</sup>

Thus, the public comments clearly raised the issue that the Permit did not include sufficient monitoring, recordkeeping, and reporting to assure compliance with the numerical CO and NOx emission limits in Condition 4.1.5.a.

### 3. Analysis of WVDEP’s Response

Since the NSR Modification Permit containing the applicable CO and NOx emission limits does not contain monitoring provisions addressing these emissions from Emission Unit HE01,<sup>115</sup> the “Title V permit must include periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of compliance with the permit.”<sup>116</sup> Neither the Permit nor the RTC fulfills that requirement for the hourly and yearly CO and NOx emission limits in Condition 4.1.5.a, as explained below.

WVDEP generally addressed the adequacy of monitoring, recordkeeping, and reporting to assure compliance with the numeric CO and NOx emission limits in Condition 4.1.5.a similarly to how the Department addressed the adequacy of VOC emission limit compliance discussed above – by noting that emission limit compliance is “derived from several underlying sources and compliance is monitored using several methods” and providing a table of “Five Factor Monitoring Analysis” for each pollutant.<sup>117</sup> WVDEP once again relied on the fact that NSR Modification Permit R14-0037A established these CO and NOX emission limits based on maximum concentration values, maximum design capacity, and maximum production capacity

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<sup>114</sup> *Id.*; see also Public Comments at 14-15, Comment 5.a. and 5.b (raising the lack of clarity regarding “required monitoring” and reporting of resulting emissions).

<sup>115</sup> NSR Modification Permit at 37, Section 4.2 (similar provisions to Section 4.2 of the Title V Permit and no provisions specific to CO and NOx emissions from Emission Unit HE01).

<sup>116</sup> *Deer Park Order* at 18, citing 40 C.F.R. § 70.6(a)(3)(i)(B). See also *Clairton Order* at 9.

<sup>117</sup> RTC at 55 *et seq.*

and asserted that the “likelihood of violating the emission limits is low” even with variability in those emissions.<sup>118</sup> However, the RTC does not contain any specific analysis of the impact of variability on CO and NOx emissions, much less a showing that operating at maximum production capacity was likely to result in the highest CO and NOx emissions at these specific units, especially for CO emissions.<sup>119</sup> WVDEP also relied on recent performance testing and Rockwool’s annual emission reports to show that CO and NOx emissions remain below the Permit limits,<sup>120</sup> but it’s not clear that this information is relevant since actual emissions are not a part of the five-factor analysis. The RTC noted the lack of add-on controls for CO emissions, but the control of NOx emissions with good combustion practices and low NOx burners.<sup>121</sup> Finally, WVDEP provided a list of other required permit conditions at the Facility, and noted that the Permit’s monitoring, testing, reporting, and recordkeeping requirements are similar to those found in existing permits for similar facilities.<sup>122</sup>

However, WVDEP’s five-factor analysis of the adequacy of compliance assurance for the CO and NOx emission limits in Condition 4.1.5.a contains the same key flaws as those discussed above for the VOC emission limit: 1) the Permit itself does not identify the specific terms that the Department, EPA, or the public can use to determine compliance with the CO and NOx hourly and yearly emission limits in Condition 4.1.5.a, and 2) WVDEP does not explain *how* the various things “already required” at the RAN Facility assure compliance with these specific numeric CO and NOx emissions limits.<sup>123</sup> It is not clear how the “Records of Monitoring

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<sup>118</sup> *Id.* at 56, 57.

<sup>119</sup> *See* Ex. 9, JCF Comments on NSR Modification Permit at 18, Comment 9 (explaining that while maximum production capacity (or load) is only likely to result in maximum emissions NOx, maximum emissions for CO are likely to occur at lower loads).

<sup>120</sup> RTC at 56, 58.

<sup>121</sup> *Id.* at 45 and 63.

<sup>122</sup> *Id.* at 45-46 and 63-65.

<sup>123</sup> *Union Carbide Order* at 12 (emphasis added).

(condition 4.4.1)” and reporting of “deviations from permitted monitoring parameters (condition 3.5.8)” apply to these CO and NO<sub>x</sub> emissions since there is no monitoring of these emissions from HE01 required in Section 4.2 of the Permit. Likewise, it is not clear how conducting performance testing every three years will assure on-going compliance with the hourly and yearly CO and NO<sub>x</sub> emission limits applicable to Emission Unit HE01.<sup>124</sup> Accordingly, the lack of clear, consistent emissions monitoring and the use of sporadic performance testing make it difficult to determine how long any CO or NO<sub>x</sub> violations have been occurring so that WVDEP, EPA, and the public can “take appropriate enforcement action.”<sup>125</sup> Because this Permit suffers the same deficiencies as EPA identified in the *Montgomery County Order*, as discussed above,<sup>126</sup> it fails to assure compliance with the CO and NO<sub>x</sub> emission limits in Condition 4.1.5.a.

Furthermore, WVDEP’s reliance on past stack testing and generalized assertions about the “likelihood” of compliance cannot substitute for the enforceable monitoring required by Part 70. Intermittent performance tests and historical data do not assure ongoing compliance, particularly where emissions are variable or dependent on operating parameters that can change over time.<sup>127</sup> The Clean Air Act requires Title V permits to establish monitoring and reporting that provide representative data to demonstrate compliance throughout the permit term.<sup>128</sup> Without such enforceable monitoring, neither EPA, WVDEP, nor the public can determine whether the CO and NO<sub>x</sub> limits in Conditions 4.1.4.a and 4.1.5.a are being met on an ongoing basis.

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<sup>124</sup> See, e.g., *Hu Honua Order* at 10 (finding Title V permit inadequate where it “does not specify how the facility’s CO and NO<sub>x</sub> emissions shall be determined or measured for assessing compliance with these CO and NO<sub>x</sub> emission limits” in the relevant permit condition).

<sup>125</sup> *Pencor-Masada Order* at 7.

<sup>126</sup> See n. 87, *supra*, and related discussion.

<sup>127</sup> See *ConEd 74th St. Order* at 7-8 (finding stack testing at five-year intervals inadequate where operating variables can impact pollution emissions).

<sup>128</sup> *Midwest Gen Order* at 6 (citing 40 C.F.R. § 70.6 (a)(3)(i)(B)).

As explained above, WVDEP failed to adequately respond to JCF’s comments and demonstrate that the Permit contains adequate and enforceable monitoring, recordkeeping, and reporting necessary to assure compliance with the hourly and yearly CO and NOx emission limits for Emission Unit HE01. Accordingly, EPA must grant this Petition on this issue and either direct WVDEP to revise the Permit to include supplemental monitoring to assure compliance with the hourly and yearly CO and NOx emission limits contained in Condition 4.1.5.a, or, at a minimum, require WVDEP to explain fully how the current permit provisions assure continuous, enforceable compliance with these numeric emission limits.

**B. The Permit fails to include the applicable NESHAP Subpart DDD operations, maintenance, and monitoring plan.**

1. Specific Grounds for Objection, Including Citation to Permit Terms and Part 70 Requirements Not Met

The Operations, Maintenance, and Monitoring Plan (“OMM Plan”) required under the National Emission Standards for Hazardous Air Pollutants (“NESHAP”) rules in 40 CFR Part 63 Subpart DDD is an applicable requirement of the RAN Facility.<sup>129</sup> Thus, WVDEP must include the OMM Plan and its underlying requirements in the Permit under the CAA and Part 70 rules as NESHAP requirements applicable to this source.<sup>130</sup>

In addition, numerous conditions of the Permit require Rockwool to comply with the OMM Plan. For example, under Conditions 4.1.4.d.1.ii.A and 4.1.4.d.2.iii, Rockwool must take “corrective actions as specified in your [OMM Plan]” to address potential PM emissions.<sup>131</sup> Likewise, Condition 4.1.12.f.3.i.H of the Permit requires that Rockwool “[o]perate and maintain

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<sup>129</sup> Permit at 59, Condition 4.2.16.

<sup>130</sup> 40 C.F.R. § 70.2 (definition of “applicable requirement” at (4) includes NESHAP requirements).

<sup>131</sup> Permit at 35 and 36. *See also id.* at 48 and 50, Conditions 4.1.12.d.2.i.C and ii.H (similar OMM Plan requirements).

the incinerator as specified in your [OMM Plan]” to address VOC emissions.<sup>132</sup> Thus, inclusion of the OMM Plan is necessary to assure compliance with the Permit’s terms and to ensure that the Permit contains adequate and enforceable monitoring requirements.

The Permit is deficient because the RAN Facility’s Subpart DDD OMM Plan is not included in the Permit, either in specific Permit terms or as an attachment, as required by the CAA and relevant Part 70 rules.

## 2. Issue Raised in Public Comment

Petitioner’s public comments clearly raised the failure to include the OMM Plan required by NESHAP Subpart DDD in the Permit, stating:<sup>133</sup>

### *Missing plans necessary to determine compliance*

When an applicable requirement requires a source to develop and operate in accordance with a specific plan, that plan is part of the applicable requirement and must be included in the source’s Title V permit pursuant to 40 C.F.R. § 70.6(a)(1).<sup>98</sup> As EPA has explained in multiple Title V orders, “plans (or portions of plans) that are necessary to impose an applicable requirement or assure compliance with an applicable requirement need [to] be included (or incorporated) in a Title V permit.”<sup>99</sup> The Draft Permit includes a number of provisions that require Rockwool to develop specific operation, maintenance, and/or monitoring plans in order to comply with applicable state or federal requirements, but these plans are not included in the Draft Permit. For example:

The public comment also specifically included the “operations, maintenance, and monitoring plan required by § 63.1187 ,” i.e., NESHAP Subpart DDD.<sup>134</sup> Petitioner noted that the OMM Plan was not included in the Draft Permit, which only included a copy of Subpart DDD

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<sup>132</sup> *Id.* at 52.

<sup>133</sup> Public Comments at 20, citing *In re Alliant Energy - EP L Edgewater Generating Station*, Order on Petition No. V -2009-2 (August 17, 2010), [https://www.epa.gov/sites/default/files/2015-08/documents/edgewater\\_response2009.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/edgewater_response2009.pdf), at 13-14, and *In re Plains Marketing LP, Mobile Terminal at Magazine Point, et al. (Sept. 18, 2023) (“Plains Marketing Order”)*, <https://www.epa.gov/system/files/documents/2023-09/plains-marketing-et-al.-order-09-18-2023.pdf>, at 51 (and other Title V orders cited in n.56).

<sup>134</sup> Public Comments at 21, Comment o.

regulatory language “setting forth the required elements of such a plan.”<sup>135</sup> The comments also noted that the OMM Plan was not included “as part of [Rockwool’s] application for the Title V permit” as required by the Subpart DDD rules.<sup>136</sup> Petitioner’s comments also identified a number of Permit Conditions that required Rockwool to follow the Plan.<sup>137</sup> Accordingly, the Comments argued that because the specific terms of the Plan were necessary to determine Rockwool’s compliance with the NESHAP requirements, it had to be included in the Permit, and that WVDEP should re-notice with Draft Permit with the OMM Plan for public comment.<sup>138</sup>

### 3. Analysis of WVDEP’s Response

WVDEP clarified that the OMM Plan was included in Rockwool’s January 30, 2025 Application amendment and was attached to the RTC as Attachment A.<sup>139</sup> WVDEP then asserted that because Subpart DDD did not require that the OMM Plan be included in the Title V Permit, the Plan “has only been incorporated by reference” into the Permit and would not be re-noticed. This response is deficient for two reasons.

First, Petitioner cannot find where Rockwool’s OMM Plan has been “incorporated by reference” into the Permit. The Plan is neither attached to the Permit nor are its terms specifically included in the text of the Permit. Instead, WVDEP only amended one Condition of the Permit with a note as follows:<sup>140</sup>

<p>4.2.16. <b>40 C.F.R. 63 Subpart DDD</b> <b>What do I need to know about operations, maintenance, and monitoring plans?</b></p> <p>a. An operations, maintenance, and monitoring plan must be submitted to the Administrator for review and approval as part of your application for the title V permit. <i>Note: The 40 C.F.R. 63 Subpart DDD OMM Plan was submitted as part of the Title V Permit Application Amendment received on January 30, 2025 and reviewed and approved by WV DAQ .</i></p>
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<sup>135</sup> *Id.*; see also 40 CFR 63.1187(a).

<sup>136</sup> Public Comments at 21, Comment o.

<sup>137</sup> *Id.* and n.101.

<sup>138</sup> *Id.*

<sup>139</sup> RTC at 135, Response to Comment 5o.

<sup>140</sup> Permit at 59.

This note does not incorporate the OMM Plan by reference into the Permit; it only states that Rockwool submitted and WVDEP approved the Plan. Nothing in the Permit states that the terms of the OMM Plan are considered part of the Title V Permit and enforceable under it.<sup>141</sup> Likewise, WVDEP's decision to attach the OMM Plan to the RTC document does not make the Plan part of the Title V Permit or otherwise enforceable under the Act.<sup>142</sup>

Second, even if the Subpart DDD rules do not require that WVDEP include the OMM Plan in the Title V Permit, the Permit must include the Plan under the CAA and EPA's Part 70 Rules. As EPA found in the *Oak Creek* Title V Order, when "compliance with the approved [plan] is required" by the specific terms of a permit, "the plan must be included in the permit" under 40 C.F.R. § 70.6(a)(1).<sup>143</sup> That is exactly the case here. As noted above, Conditions 4.1.4.d.1.ii.A, 4.1.4.d.2.iii, 4.1.12.d.2.i.C, 4.1.12.d.2.ii.H, and 4.1.12.f.3.i.H of the Permit require the RAN Facility to comply with specific requirements of the OMM Plan.<sup>144</sup> Without including the specific requirements of the OMM Plan in the Permit, these Conditions are unenforceable, because it is impossible for WVDEP, EPA, and citizens to determine whether Rockwool is complying with the requirements of the Plan, and, if not, to take appropriate enforcement action.<sup>145</sup>

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<sup>141</sup> See, e.g., 45CSR30-5.1.a.2 (noting that terms incorporated into a title V permit "shall be enforceable" by WVDEP and EPA), and 40 C.F.R. 51.9(b)(3) (EPA rule specifying that material incorporated by reference must inform the user "that the incorporated [information] is a requirement").

<sup>142</sup> See, e.g., 40 CFR § 70.13 (stating that the response to comments document is only part of the administrative record).

<sup>143</sup> *In the Matter of WE Energies Oak Creek Power Plant, Permit No. 241007690-P-10* (June 12, 2009), [https://www.epa.gov/sites/default/files/2015-08/documents/oak\\_creek\\_decision2007.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/oak_creek_decision2007.pdf), at 26. See also *Midwest Gen Order* at 7 (directing the permitting authority to "either include the approved monitoring plan in the permit or incorporate it by reference into the title V permit"); *In the Matter of Columbia University*, Pet. NO. II-2000-08 (Dec. 16, 2002), [https://www.epa.gov/sites/default/files/2015-08/documents/columbia\\_university\\_decision2000.pdf](https://www.epa.gov/sites/default/files/2015-08/documents/columbia_university_decision2000.pdf), at 27 (noting where a facility is subject to a plan, the permit must "properly incorporate that plan").

<sup>144</sup> Permit at 35, 36, 48, 50, and 52.

<sup>145</sup> *Pencor-Masada Order* at 7.

Finally, WVDEP must include the OMM Plan in the Permit because application of the Plan is necessary to determine compliance with other applicable requirements. As explained in Petitioner’s comments – and completely unaddressed in the Department’s response the public comments on this issue – EPA already found that “plans (or portions of plans) that are necessary to impose an applicable requirement or assure compliance with an applicable requirement need [to] be included (or incorporated) in a Title V permit.”<sup>146</sup> The Permit specifies that compliance with PM emission and controls requirements depends, in part, on the OMM Plan requirements in Conditions 4.1.4.d.1.ii.A and 4.1.4.d.2.iii,<sup>147</sup> and that VOC emission requirements are met, in part, through meeting the OMM Plan under Condition 4.1.12.f.3.i.H.<sup>148</sup> In addition, per the Department’s own analysis, the OMM Plan is part of the multi-prong approach to assure compliance with other applicable requirements in the Permit. For example, the five-factor analysis in the RTC includes compliance with Subpart DDD, including the OMM Plan, as requirements that assure compliance with multiple emission limits in Conditions 4.1.4.a and 4.1.5.b.<sup>149</sup> Thus, under 40 C.F.R. § 70.6(a)(3)(i)(B), to the extent the Permit relies on the OMM Plan to assure compliance with these (and other) Permit conditions, the OMM Plan must be included in the Permit.<sup>150</sup>

Because the OMM Plan is an applicable requirement of the RAN Facility, specific Permit terms require the Facility to comply with the Plan, and WVDEP relies on the Plan to assure compliance with other applicable requirements in the Permit, EPA must grant Petitioner’s

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<sup>146</sup> *Plains Marketing Order* at 51.

<sup>147</sup> Permit at 35, 36. *See also id.* at 48 and 50, Conditions 4.1.12.d.2.i.C and ii.H (similar OMM Plan requirements).

<sup>148</sup> Permit at 52.

<sup>149</sup> *See, e.g.*, RTC discussion of compliance assurance for Condition 4.1.4.a at 41-42 (listing the Subpart DDD Plan as required for PM and mineral fiber HAPs emission limits), 48 (same for HF limits), 50 (same for HCl limits), 53 (COS limits); and RTC discussion of compliance assurance for Condition 4.1.5.a at 64 (same for VOC limits), 66 (Phenol limits), 69 (Formaldehyde limits), 71 (Methanol). Note that while WVDEP refers generally to Condition 4.2.16 for these requirements, that provision only copies the

<sup>150</sup> 40 C.F.R. § 70.6(a)(3)(i)(B).

request for an objection on this issue and direct WVDEP either to revise the Permit to include the OMM Plan, or to provide the factual and legal basis for excluding the Plan from the Permit that aligns with the relevant Title V statutory and regulatory requirement.

**C. The Permit fails to include clear and enforceable terms to address applicable requirements of NESHAP Subparts DDD and ZZZZ.**

1. Specific Grounds for Objection, Including Citation to Permit Terms and Part 70 Requirements Not Met

As stated in the Permit, certain emission units at the RAN Facility are subject to the requirements of federal NESHAP and New Source Performance Standard (“NSPS”) rules. While many provisions in the Title V Permit address these requirements, the following two Conditions lack the specific federal requirements applicable to the RAN Facility:

- Condition 4.1.5.c contains the NESHAP Subpart DDD requirement that applies to Emission Unit HE01, but Condition 4.1.5.c.1.ii fails to specify the specific operating parameters that are applicable to the RAN Facility;<sup>151</sup> and
- Condition 4.1.10 contains the NESHAP Subpart ZZZZ requirements for the Emergency Fire Pump Engine, Emission Unit EFP1, but it is unclear whether or how these requirements apply to EFP1 without additional information regarding the applicability of “criteria in paragraphs (c)(1) through (7) of §63.6590” or the engine type.<sup>152</sup>

The Permit is deficient because Conditions 4.1.5.c.1.ii and 4.1.10.d do not contain clear and enforceable terms necessary to make these NESHAP requirements applicable to and enforceable against the RAN Facility.<sup>153</sup>

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<sup>151</sup> Permit at 38-39.

<sup>152</sup> *Id.* at 45, 48.

<sup>153</sup> 40 C.F.R. § 70.2 (definition of “applicable requirement” at (4) includes NESHAP requirements).

## 2. Issue Raised in Public Comment

Petitioner clearly raised the issue of the lack of specificity in the NESHAP and NSPS provisions of the Permit, noting that the “specific Conditions of the Draft Permit do not set forth the specific state and federal requirements in a manner that make them applicable to the RAN facility or enforceable by the public.”<sup>154</sup> The public comments explained that the Department’s decision to simply copy of the text of entire NESHAP and NSPS rules into the Draft Permit was insufficient to comply with Title V “because these rules have multiple applicability and compliance requirements that depend, in part, on the specific source or operation at issue,” and that if the Department did not “identify the specific requirements that apply to the RAN facility, it is not possible for Rockwool, WVDEP, or the public to determine which requirements apply and whether the RAN facility is complying with them.”<sup>155</sup>

The public comments then gave examples of the lack of clarity regarding NESHAP and NSPS requirements and noted that failure to include the specific requirements from these federal rules that are applicable to the RAN Facility would result in ambiguous permit terms that would not be practically enforceable.<sup>156</sup> While JCF’s public comments did not specifically identify Conditions 4.1.5.c.1.ii and 4.1.10.d, the Draft Permit included more than 30 pages of incorporated NSPS and NESHAP provisions.<sup>157</sup> So instead of submitting multiple, repetitive comments and/or commenting on text that WVDEP might determine was inapplicable to the RAN Facility, the public comments addressed the overall issues the incorporation of the NSPS and NESHAP requirements in the Permit, provided a few illuminating examples of these

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<sup>154</sup> Public Comments at 11, Comment 4.

<sup>155</sup> *Id.*

<sup>156</sup> *Id.* at 12-13.

<sup>157</sup> *See generally* WVDEP, [Draft] Permit to Operate Pursuant to Title V of the Clean Air Act, Issued to: ROXUL USA Inc., RAN Facility, R30-03700108-2025 (Undated), [https://dep.wv.gov/daq/permitting/titlevpermits/Documents/June%202024/037-00108/DraftPermit\\_R30-03700108-2024.pdf](https://dep.wv.gov/daq/permitting/titlevpermits/Documents/June%202024/037-00108/DraftPermit_R30-03700108-2024.pdf), at 34-37, 39-41, 45-53, 58-60, 65-70, and 72-83 (incorporating NSPS and/or NESHAP requirements).

inadequacies, and directed WVDEP to “review *each* provision of the Draft Permit intended to address [the NESHAP and NSPS] requirements and revise them to clearly state the specific requirements applicable to this facility,” such that the “revised conditions must contain all necessary numerical limits and related requirements from those rules.”<sup>158</sup>

WVDEP clearly understood the breadth of the issue raised in JCF’s comment, since the Department reviewed the entire Permit “for the types of ambiguity identified in the commenter’s examples” and made changes to twenty-five Conditions, many more than the five Conditions specifically raised in the comment examples.<sup>159</sup> Accordingly, Petitioner clearly raised the issue of the deficiencies in the Departments incorporation of all NESHAP provisions in the Permit, including the Subpart DDD and ZZZZ requirements contained in Conditions 4.1.5.c.1.ii and 4.1.10.d, during the public comment period.<sup>160</sup>

### 3. Analysis of WVDEP’s Response

As noted above, WVDEP revised many of the Permit conditions for the applicable requirements of the federal NSPS and NESHAP rules to address “the types of ambiguity identified” by Petitioner.<sup>161</sup> These changes included identifying the specific emission unit to which a requirement applied in the Condition, changing ambiguous cross references, and “streamlin[ing]” emission limit requirements to delete nonapplicable requirements contained in the federal rules.<sup>162</sup> However, the list of changes made by the Department did not include

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<sup>158</sup> Public Comments at 13 (emphasis added).

<sup>159</sup> *Compare id.* at 11-12 (examples of five conditions) to RTC at 29 (listing 25 changed conditions).

<sup>160</sup> Note that the Draft and Final Title V Permits contain other Conditions addressing NESHAP and NSPS requirements for the RAN Facility that the WVDEP largely addressed in the final Permit and are not identified for an objection in this Petition.

<sup>161</sup> RTC at 29.

<sup>162</sup> *See, generally*, RTC at 29-31.

changes to the Subpart DDD requirements in Condition 4.1.5.c.1.ii or the Subpart ZZZZ requirements in Condition 4.1.10.d.<sup>163</sup>

To control HAPs emissions (including VOCs) as required by Subpart DDD, Condition 4.1.5.c.1.ii requires that the RAN Facility “meet[] the following operating limits for each curing oven or combined collection/curing operation:

- A. Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.
- B. Maintain the operating temperature of each incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.”<sup>164</sup>

As currently written, these provisions are unenforceable because the Permit does not contain “the specification ranges of the resin and binder used during the performance test,” or the “average temperature established during the performance test.”<sup>165</sup> Without incorporating these specific operating parameters in the Permit, either in Condition 4.1.5.c.1.ii or by incorporating the specific relevant performance test information as an attachment to the Permit, the specific NESHAP requirement that applies to the RAN Facility is unclear. In fact, Petitioner reviewed the more than 325 pages of Rockwool’s most recent, publicly available performance test for the RAN Facility and could not clearly identify the binder and resin speciation ranges and average temperatures necessary to determine compliance with the Subpart DDD requirement in Condition 4.1.5.c.1.ii.<sup>166</sup> Because WVDEP, EPA, and the public cannot determine which binder

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<sup>163</sup> RTC at 29 (Conditions 4.1.5.c.1.ii and 4.1.10.d not included in the list of changed conditions).

<sup>164</sup> Permit at 38-39.

<sup>165</sup> *Id.*

<sup>166</sup> See Ex.10, List of All Stack Testing documents for the RAN Facility available on WVDEP’s ApplicationXtender, and Ex.11, Rockwool’s January 17, 2025 Submission of Subpart DDD Testing (reviewed relevant sections as identified in the table of contents and searched the entire document using the terms “average temperature”, “speciation range”, “binder”, and “resin”). If WVDEP does not incorporate the specific operational parameters into Condition 4.1.5.c.1.ii, WVDIP should require Rockwool to clearly identify these ranges and the applicable average

and resin speciation ranges and average temperatures apply to Emission Unit EU01 and whether Rockwool is complying with them, Condition 4.1.5.c.1.ii is not practically unenforceable and the Permit fails to sufficiently incorporate the applicable Subpart DDD NESHAP requirement.<sup>167</sup>

Likewise, Condition 4.1.10.d. states:<sup>168</sup>

d. **40 C.F.R. 63, Subpart ZZZZ**

An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of §63.6590 must meet the requirements of this part by meeting the requirements of 40 C.F.R. part 60 subpart IIII, for compression ignition engines or 40 C.F.R. part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[45CSR34; 40 C.F.R. §63.6590(c)]

While WVDEP made changes to the requirements in Condition 4.1.10.c. to clarify their application to Emission Unit EFP1, the Department made no such clarifications for the NESHAP Subpart ZZZZ requirements in Condition 4.1.10.d.<sup>169</sup> The Permit does not state whether EFP1 “meets any of the criteria in paragraphs (c)(1) through (7) of §63.6590” or what type of engine it contains. Accordingly, it is not clear which Subpart ZZZZ requirements are applicable to the RAN Facility, and it is thus impossible to determine whether Rockwool is complying with them. The lack of clarity that results from the Department’s approach of simply copying the entire text of Subpart ZZZZ without adding source-specific information makes the Permit insufficient to address the NESHAP requirement applicable to the RAN Facility and unenforceable as a practical matter.

Conditions 4.1.5.c.1.ii and 4.1.10.c fail to contain the applicable Subpart DDD and ZZZZ requirements in a clear and enforceable manner, which makes it impossible for WVDEP, EPA,

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temperature (as well as any other specific operational parameters required by the Permit) at the beginning of the testing report.

<sup>167</sup> See, e.g., *Pencor-Masada Order* at 7; *Hu Honua Order* at 10; *Yuhuang Chemical Order* at 14.

<sup>168</sup> Permit at 47.

<sup>169</sup> RTC at 31 (explaining changes to Condition 4.1.10.c) and 29 (Condition 4.1.10.d not included in the list of changed conditions).

and the Public to determine whether Rockwool is complying with the resulting NESHAP requirements. Accordingly, EPA must grant the Petition on this issue and either direct WVDEP to revise Conditions 4.1.5.c.1.ii and 4.1.10.c to clarify the specific NESHAP requirements for Emission Units HE01 and EFP1, or, at a minimum, require WVDEP to explain fully how the current permit provisions meet the requirements of the CAA and EPA's Part 70 rules.

## V. Conclusion

For the reasons discussed above, EPA must object to the Title V Permit for Rockwool's RAN Facility. As clearly raised in public comments and unresolved by the Permit and WVDEP's RTC, the Permit fails to include:

- Adequate and enforceable monitoring, testing, recordkeeping, and reporting requirements to assure continuous compliance with VOC, CO, and NOx emission limits at the Facility;
- The applicable Subpart DDD Operations, Maintenance, and Monitoring Plan; and
- Clear and enforceable terms to address the requirements of NESHAP Subparts DDD and ZZZZ.

EPA must grant Petitioner's request for an objection on these issues and direct WVDEP either to revise the Permit to make the necessary changes to bring the Permit into compliance or to provide the factual and legal basis for the adequacy of the current Permit without these changes under the relevant Title V statutory and regulatory requirements.

Respectfully submitted,

Date: September 19, 2025



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**Exhibit List**

1. Final Title V Permit for the RAN Facility (July 2025)
2. WVDEP Response to Comments (June 2025)
3. Rockwool Facebook Post (July 2020)
4. Roxul and WVDEP Fuel Switch Letters (March 2020)
5. EPA Region 3 Letter to JCF (February 2022)
6. JCF Public Comments (August 2024)
7. EPA Region 3 Title V Petition Deadlines Website
8. WVDEP Rockwool Title V Permit Issuance Email (July 2025)
9. JCF Comments on NSR Modification Permit (October 2023)
10. List of RAN Facility Stack Testing on WVDEP Website
11. Rockwool's Subpart DDD Stack Testing Results (January 2025)

NOTE: Consistent with footnote 1, *supra*, a consolidated PDF File of all the Exhibits to this Petition is available at <https://www.jeffersoncountyfoundation.org/wp-content/uploads/2025/09/JCF-Rockwool-Title-V-Petition-Exhibits-with-Public-Comment-Attachments.pdf>.