Recd 11/2/21

West Virginia Environmental Quality Board Charleston, West Virginia

Jefferson County Foundation, Inc., et al.,

Appellants,

ν.

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.

FINAL ORDER

The West Virginia Department of Environmental Protection ("DEP") is charged with enforcing the State Water Pollution Control Act. See W. Va. Code § 22-11-1 et seq. As part of that charge, the DEP administers National Pollution Discharge Elimination System Water Pollution Control Construction General Permit No. WV 0115924, which is also known as the construction stormwater general permit. The current version of that permit, the 2019 General Permit referenced above, was issued on January 10, 2019.

This matter arises from a timely appeal filed by the Jefferson County Foundation, Inc., Christine Wimer, Karen Michelle Freer, and Gavin Perry (the "Appellants") challenging the DEP's reissuance of ROCKWOOL'S registration authorizing it to discharge stormwater associated with construction activities under the 2019 General Permit. At the time of the

reissuance ROCKWOOL was building a mineral wool manufacturing facility ("RAN-5") in Jefferson County West Virginia.

Appellants allege that stormwater controls at the RAN-5 facility did not sufficiently account for karst terrain. Appellants further allege they had been denied the chance to raise this objection earlier, with the initial registration under the 2012 edition of the General Permit.

A quorum of the Board heard evidence over four days between December and March 2021, from the following witnesses:

JCF et al. - Appellants

- 1) Doctor Christopher Groves Expert, Geology & Karst Terrain & Aquifers
- 2) Katheryn D. Emery Director, DEP Division of Water and Waste Management
- 3) Rick Adams Technical Analyst, Division of Water and Waste Management
- 4) Travis Hays DEP Inspector
- 5) Tommy George DEP Inspector
- 6) Yogesh Patel Assistant Director of Permitting, Division of Water and Waste Management

DEP – Appellee

The Board having granted latitude in cross-examination of Appellant witnesses Ms. Emery, Mr. Adams, Mr. Hays, Mr. George, and Mr. Patel, all DEP employees, DEP declined to recall them as witnesses.

ROCKWOOL - Intervenor

- 1) Scott G. Mandirola Deputy Cabinet Secretary of External Affairs and former Director, Division of Water and Waste Management
- 2) Larry Board DEP Environmental Regional Program Manager for Stormwater Permitting.
- 3) Doctor Timothy Bechtel Expert, Karst Hydrology, Sinkholes, and Best Management Practices
- 4) Peter Regenberg Vice President of US Operations for ROCKWOOL

¹ The parties also submitted video evidentiary depositions of witnesses.

Appellant's Rebuttal

- 1) Dr. Christopher Groves [Expert]
- 2) Andrew Parsons, DEP Permit Reviewer

At the conclusion of the evidentiary hearing the parties were directed to submit proposed findings of fact and conclusions of law and reply briefs. After consideration of the proposed findings and conclusions, reply briefs, the evidence of record, expert testimony and arguments of counsel,² the Board hereby denies the appeal and finds the DEP acted lawfully when it reissued Rockwool's registration under the 2019 General Permit. The Board further finds Rockwool's stormwater controls sufficiently accounted for karst terrain and that best management practices were in place. According the appeal is dismissed from the docket.

At the heart of this case is whether ROCKWOOL submitted a sufficient karst mitigation plan with its application for reissuance under the 2019 General Permit. The evidence presented shows ROCKWOOL submitted a document that the DEP considers to be a karst mitigation plan. The DEP permit reviewer, directed ROCKWOOL to submit its Supplemental Sinkhole Repair Plan as its karst mitigation plan for this site, and ROCKWOOL did as directed. The question instead is whether a sinkhole mitigation plan meets the standards for a karst mitigation plan. There is no statutory or regulatory definition to guide the Board, and the so-called GPP Template (Appellants' Exhibit 93) is not a statute, regulation, or official DEP guidance. Moreover, the

² All argument of counsel, proposed findings of fact and conclusions of law have been considered and reviewed with reference to the evidentiary record before the Board, as well as applicable law. To the extent that the proposed findings of fact, conclusions of law and arguments advanced by the parties are in accordance with these findings of fact, conclusions and legal analysis of the Board and are supported by the evidence, they have been adopted in their entirety. To the extent that the proposed findings, conclusions, and arguments are inconsistent therewith, they have been rejected. Certain proposed findings and conclusions have been omitted as not relevant or necessary to a proper decision. To the extent that the testimony of the various witnesses is not in accord with the findings stated herein, it is not credible.

DEP requires industrial facilities to consider karst under W. Va. Code R. §47-58-4.10, and ROCKWOOL met that obligation here by undertaking a number of karst-specific measures for site investigation and design. The Appellants failed to show that the measures that ROCKWOOL took will not prevent contaminants from infiltrating into the groundwater.

The Board is guided in part by testimony from Dr. Christopher Groves and Dr. Timothy Bechtel, two karst experts who both emphasized the importance of sinkhole prevention and mitigation to protecting groundwater in karst. The Board accordingly finds that the sinkhole mitigation plan at the ROCKWOOL site, as a karst mitigation plan, meets statutory or regulatory requirements. Any remaining objections predate the reissuance application on appeal here and fall outside the Board's jurisdiction. The Board therefore affirms. The Board, however, does recommend that the DEP review its stormwater construction permitting process as it relates to karst terrain, in that the DEP should develop official guidance for what may qualify as a Karst Mitigation Plan.

FINDINGS OF FACT

A. The Construction General Permitting Program

1. As part of its responsibility for administering the State Water Pollution Control Act, W. Va. Code § 22-11-1 et seq. (the "State WPCA"), and the State Groundwater Protection Act, W. Va. Code § 22-12-1 et seq. (the "State GPA"), the DEP has issued National Pollutant Discharge Elimination System Water Pollution Control Construction General Permit No. WV0115924 ("General Permit No. WV0115924") to regulate stormwater associated with construction activity.

- 2. The 2019 General Permit is the current version of General Permit No. WV0115924. It was issued on January 10, 2019, with a stated effective date of February 9, 2019. C.R. 2071.³ That effective date was continued to June 28, 2019, as part of an appeal in West Virginia Manufacturers Association et al. v. Director, Division of Water & Waste Management, Appeal Nos. 19-03-EQB & 19-04-EQB.
- 3. Before the 2019 General Permit took effect, the operative version of General Permit No. WV0115924 was the 2012 General Permit, which had been issued on December 5, 2012, with an effective date of January 4, 2013. C.R. 726. The 2012 General Permit was extended several times, with its last extension deferring its expiration until March 31, 2019. See January 1, 2019, Letter from Harold D. Ward to Permittees, available at https://bit.ly/3dZVazU (last accessed Apr. 28, 2021).

B. ROCKWOOL's Permitting History

- 4. On July 31, 2017, ROCKWOOL submitted an application for registration under the 2012 General Permit (the "2017 Registration Application"). C.R. 750.
- The DEP approved ROCKWOOL's 2017 Registration Application on October 19,
 2017. C.R. 750.
- 6. On June 21, 2019, ROCKWOOL submitted an application for reissuance under the new 2019 General Permit (the "2019 Reissuance Application"). C.R. 1348.
- 7. The DEP submitted the 2019 Reissuance Application to public comment on September 18, 2019, and to public hearing on October 23, 2019. C.R. 1985. The DEP received

³ All citations to the Certified Record are to the Second Supplemental Certified Record submitted on February 12, 2021.

573 written comments and an additional 47 spoken comments during the public hearing. C.R. 1986.

8. The DEP approved ROCKWOOL's 2019 Reissuance Application on February 25, 2020. C.R. 1346. It issued a written response to the public comments that same day. See C.R. 1985.

C. Notice of Appeal and Specific Objections

- 9. On March 26, 2020, the Appellants filed a Notice of Appeal from the DEP's approval of ROCKWOOL's 2019 Reissuance Application. C.R. 2.
- 10. The Notice of Appeal raised specific objections in two general categories. In the first category, the Appellants alleged the DEP should have required public notice and comment earlier than September 2019 because (a) the true limits of disturbance ("LOD") in the 2017 Registration Application exceeded 100 acres, (b) the addition of a sinkhole mitigation plan in October 2018 was a major modification, and (c) construction activity exceeded one year in October 2018. C.R. 11-12. In the second category, the Appellants alleged that both applications allowed for inappropriate stormwater controls in karst terrain with potential harm. *Id*.

D. Evidentiary Hearing

11. The evidentiary hearing served to narrow the issues from the specific objections set forth in the Appellants' Notice of Appeal. All parties are now in general agreement that this appeal turns on the answer to two questions: (1) Was ROCKWOOL required to submit a karst mitigation plan as part of its 2019 Reissuance Application? And (2) Did ROCKWOOL submit a karst mitigation plan as part of its 2019 Reissuance Application? The Board nonetheless

discusses below specific objections from the Appellants' Notice of Appeal that predate the 2019 Reissuance Application.

E. Relevant Testimony

1. Pre-2019 Reissuance Application

12. The Appellants' Notice of Appeal raised two types of specific objections pertaining to ROCKWOOL's 2017 Registration Application. First, the Appellants alleged that DEP allowed ROCKWOOL to avoid public notice and comment for that application by approving inaccurate information about the limits of disturbance and grading timeline and allowing the submission of a Supplemental Sinkhole Repair Plan without a major modification. C.R. 11-12. And second, the Appellants alleged that the DEP did not give proper attention to the construction activities' location in karst. *Id*.

a. Public Notice and Comment

- 13. All parties agree that ROCKWOOL's 2017 Registration Application was not submitted for public notice and comment.
- 14. Under § G.4.b.5 of the 2012 General Permit, which was in effect when the 2017 Registration Application was submitted, public notice and comment was required if any one of three circumstances was met: (a) the project was expected to discharge to Tier 3 waters; (b) the project was expected to disturb 100 or more acres; or (c) the project's grading phase of construction was expected to last for more than one year. C.R. 740. Only the second two circumstances were at issue here.
- 15. In instructions for applicants using the agency's Electronic Submission System ("ESS"), the DEP directed applicants to calculate the LOD by "[including] ALL disturbed areas

directly related to construction of the entire project (offsite borrow areas, offsite waste sites, access roads, utility installation, sediment controls etc.)." Appellants' Ex. 17. The DEP also directed applicants in those same instructions to check the box for public comment "[i]f the major phase of grading will last for 1 year or longer." Intervenor's Ex. 15 (emphasis added).

- 16. ROCKWOOL's 2017 Registration Application identified 98.8 acres as the LOD. C.R. 753. Rick Adams testified that he had no reason to believe that this LOD was inaccurate. Day 1 Hr'g Tr. 245:23-246:1. He also testified that utility lines connecting to ROCKWOOL's facility were covered by a separate registration under the DEP's construction stormwater permitting program, meaning that they did not need to be considered in the LOD. Day 1 Hr'g Tr. 246:5-246:11. The same was true for a roadway that ROCKWOOL had not disturbed or planned to disturb. Day 2 Hr'g Tr. 100:4-100:17. ROCKWOOL was never issued a notice of violation for exceeding its approved LOD. Day 2 Hr'g Tr. 50:4-50:7.
- 17. Peter Regenberg testified that the major phase of grading at the RAN-5 facility was completed between an approximately 10-11 month period starting in October or November 2017 and ending in September 2018. Day 4 Hr'g Tr. 21:12-21:14 & 22:2-22:11. It was during that period that ROCKWOOL prepared the site to become "pad-ready" for construction. Day 4 Hr'g Tr. 21:15-21:22. ROCKWOOL was never issued a notice of violation associated with its timeline for grading activity. Day 2 Hr'g Tr. 38:12-38:15.
- 18. Rick Adams testified that nothing in the 2012 General Permit tied permit coverage to the timeline of grading activity; the registration issued to ROCKWOOL under the 2012 General Permit spanned the entire period for which that permit was effective. Day 2 Hr'g

Tr. 42:9-42:12 & 44:6-44:8. Adams similarly testified that violation of a permit condition does not terminate coverage. Day 2 Hr'g Tr. 23:22-23:24.

Permit, certain modifications could require public notice under § G.4.b.5 of the 2012 General Permit, certain modifications could require public notice under § C.11. C.R. 730. DEP's Modification Guidance Policy (the "Modification Policy") identifies four circumstances where a modification could trigger public notice: (a) increases or decreases to the LOD of more than one-half acre; (b) redesign, removal, or addition of sediment basins or permanent stormwater ponds; (c) changes to the grading plan or project activity that would require redesign of sediment basins or stormwater ponds; or (d) other specific circumstances, such as administrative compliance orders or legal action, that would make documentation important. C.R. 2235-2236. None of those four circumstances applied to the submission of ROCKWOOL's Supplemental Sinkhole Repair Plan in October 2018. See, e.g., C.R. 2220. Rick Adams also testified that it is common to perform redline modifications to Stormwater Pollution Plans. Day 2 Hr'g Tr. 48:16-48:21.

b. Consideration of Karst

- 20. All parties agree that the 2012 General Permit did not require applicants to submit a Karst Mitigation Plan. See, e.g., Day 1 Hr'g Tr. 215-5:-215:6 & Board Dep. Tr. 25:5-25:9. The 2012 General Permit also did not require applicants to submit a Groundwater Protection Plan, although its preparation was required under § G.4. C.R. 739.
- 21. Before starting construction, ROCKWOOL retained Specialized Engineering to perform soil test borings, air track drilling, and electrical resistivity and shear wave testing. Intervenors' Ex. 5. Dr. Timothy Bechtel testified that these investigations provide information

about subsurface voids and are considered to be best practices in karst. Bechtel Dep. Tr. 35:12-35:20, 46:23-47:3 & 59:15-59:20.

- 22. Dr. Bechtel also testified about design choices ROCKWOOL made to account for karst. Its permanent rainwater reuse and stormwater ponds at RAN-5 were designed with a triple-liner system. At the top is a 60 mil high-density polyethylene ("HDPE") liner that was double-welded at the seams and then vacuum tested during installation. Bechtel Dep. Tr. 19:5-19:11. Underneath the polyethylene liner is a geosynthetic clay liner ("GCL") containing powdered bentonite that will swell and expand if a leak were to develop in the HDPE liner. Bechtel De. Tr. 19:12-19:20. And underneath the GCL is a high-strength geotextile mesh that supports the weight of the other liner systems and any water in the ponds. Bechtel Dep. Tr. 19:21-20:2. Dr. Bechtel and Rick Adams both testified that the ponds at RAN-5 are designed to maintain a shallow water level that minimizes head pressure and reduces the potential for leaks. Bechtel Dep. Tr. 20:9-20:19 & Day 2 Hr'g Tr. 57:18-57:24. Each also acknowledged that the liner system for these permanent ponds represents the standards recommended by the Chesapeake Stormwater Network Bulletin No. 1 (the "CSN Bulletin") plus two additional factors of safety. Bechtel Dep. Tr. 60:16-60:23 & Day 2 Hr'g Tr. 57:12-57:17.
- 23. Two other design choices that Dr. Bechtel identified as accounting for karst were the placement of several buildings on micropiles, which are helical rods cast in concrete through the bedrock, and the installation of a liner system under one of the production buildings. Bechtel Dep. Tr. 50:20-51:3 & 52:12-52:18. Peter Regenberg similarly testified that ROCKWOOL investigated soil and subsurface conditions at RAN-5 to ensure that it would not be placing heavy buildings on top of voids. Day 4 Hr'g Tr. 37:18-38:4.

- 24. Dr. Bechtel also testified about stormwater discharge and groundwater monitoring at RAN-5. He testified that ROCKWOOL had reduced discharges below predevelopment levels by reusing much of the stormwater and then directing the remainder in diffused flow to a vegetated swale. Bechtel Dep. Tr. 56:18-56:20. He also testified that ROCKWOOL had installed four groundwater monitoring wells. Bechtel Dep. Tr. 53:21-54:11. Dr. Bechtel testified that reducing and diffusing stormwater discharge are sinkhole mitigation measures in karst, and groundwater monitoring wells are a standard way to monitor groundwater impacts. Bechtel Dep. Tr. 54:16-55:1 & 56:15-56:23.
- 25. Dr. Christopher Groves did not offer any opinions on the stormwater controls or sinkhole mitigation measures implemented under either the 2017 Registration Application or the 2019 Reissuance Application. Day 1 Hr'g Tr. 132:8-132:16 & 138:12-138:19. Though his report notes that "there are strategies and practices that can help to mitigate these risks [from construction in karst]," he testified that these strategies and practices were outside his area of expertise. Appellants' Ex. 11 *26 & Day 1 Hr'g Tr. 56:19-57:9. He also testified that he did not evaluate the nature of any impact from a release to the groundwater under ROCKWOOL's facility. Day 1 Hr'g Tr. 122:17-122:21. Instead, he testified that stormwater in karst can rapidly infiltrate and then flow through the groundwater, which makes karst aquifers highly vulnerable to contamination. Day 1 Hr'g Tr. 46:23-57:5 & 69:3-69:13. Dr. Groves criticized the materials submitted with ROCKWOOL's application for not having performed a literature review for karst in Jefferson County and representing an inadequate understanding of karst groundwater flow. Day 1 Hr'g Tr. 117:7-117:12 & 120:15-120:17. Dr. Groves opined that ROCKWOOL should have performed dye tracing to confirm the direction and rate of groundwater flow underneath its

facility. See, e.g., Day 1 Hr'g Tr. 120:13-121:1. To the extent that Dr. Groves disagreed with Dr. Bechtel, however, it was on minor points: he believed that Dr. Bechtel had minimized the significance of certain sinkholes and had mischaracterized groundwater monitoring wells as a good, rather than standard, way for monitoring groundwater. Day 4 Hr'g Tr. 83:8-85:2.

2. 2019 Reissuance Application

- 26. The Appellants' Notice of Appeal focused its specific objections to the 2019 Reissuance Application on the attention given to the construction activities' location in karst. As noted above, the Board and the parties are now in general agreement that these are the only remaining objections and this appeal turns on two questions: (a) whether ROCKWOOL was required to submit a Karst Mitigation Plain with its 2019 Reissuance Application and (b) whether ROCKWOOL submitted a Karst Mitigation Plan with its 2019 Reissuance Application.
- 27. The parties also agree that ROCKWOOL's 2019 Reissuance Application was submitted for public comment and hearing. The DEP received 573 emails, and 47 of the 205 attendees at a public hearing in Shepherdstown on October 23, 2019, offered some form of spoken comment. *See* C.R. 1985-1986. The DEP responded to these comments in a February 25, 2020, letter. C.R. 1985.
 - a. Whether a Karst Mitigation Plan was required with the 2019 Reissuance Application
- 28. In contrast to the 2012 General Permit, which required the preparation of a Groundwater Protection Plan but not its submission, § II.I.1 of the 2019 General Permit requires applicants to both prepare and submit a Groundwater Protection Plan as a stand-alone document. C.R. 2092.

- 29. Section II.I.2.c of the 2019 General Permits provides that "[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." C.R. 2092. This section is included in Part II of the 2019 General Permit, which is entitled "Pre-Construction Requirements." C.R. 2078.
- 30. Kathy Emery, Yogesh Patel, Rick Adams, Larry Board, and Andrew Parsons all testified that the 2019 General Permit requires a Karst Mitigation Plan. Day 1 Hr'g Tr. 184:1-184:2 (Emery); Day 2 Hr'g Tr. 165:2-165:6 (Patel); Day 1 Hr'g Tr. 205:22-206:2 (Adams); Board Dep. Tr. 25:1-25:3 (Board); Parsons Dep. Tr. 52:24-53:3 (Parsons). Emery, however, testified that she had no role in drafting the 2019 General Permit. Day 1 Hr'g Tr. 176:16-176:17. And Patel testified that he reviewed the 2019 General Permit but did not participate in drafting it. Day 2 Hr'g Tr. 164:4:-164:10.
- 31. Both Rick Adams and Larry Board were involved in drafting the 2019 General Permit. Day 1 Hr'g Tr. 204:17-204:20 & Board Dep. Tr. 21:21-22:2. Adams, who reviewed ROCKWOOL's 2019 Reissuance Application, and Board, who approved it, distinguished between registration applications and reissuance applications. Adams, for instance, referred to ROCKWOOL having applied for a registration under the 2012 General Permit when it submitted its 2017 Registration Application. Day 2 Hr'g Tr. 28:15-28:16. But he referred to that registration having been reissued under the 2019 General Permit when ROCKWOOL submitted its 2019 Reissuance Application. Day 2 Hr'g Tr. 30:19-31:6. Rick Adams testified the 2019 Reissuance Application was identified in ESS as "Type: Reissue NPDES/State Stormwater Construction No. 2." Day 2 Hr'g Tr. 32:17-32:20. Board similarly testified that the 2019 Reissuance Application was an application for a "reissuance" rather than an application for a

"registration." Board Dep. Tr. 94:1-94:8. He testified there is a distinction between the two types of applications, and the 2019 General Permit, which requires a Karst Mitigation Plan of registration applications, would not require them of reissuance applications. Board Dep Tr. 94:9-94:11, 94:20-95:15, 97:2-97:5 & 103:3-103:6. To the extent that the DEP had requested reissuance applicants to submit a Karst Mitigation Plan under the 2019 General Permit, Board testified that it had done so without express authority under the permit. Board Dep. Tr. 97:6-97:9.

- 32. In an effort to rebut Board's testimony on the DEP's authority to require a Karst Mitigation Plan of reissuance applicants under the 2019 General Permit, the Appellants introduced an October 31, 2019, letter from Catherine Libertz, the Director of the Water Division at Region III of the Environmental Protection Agency ("EPA"), to Kathy Emery (the "Libertz Letter"). Appellants' Ex. 136. In that letter, the EPA objected to a proposed modification of the 2019 General Permit that would have allowed certain permittees to continue operations under the terms and conditions of the 2012 General Permit. *Id.* *2. The EPA's objections were unrelated to the phrasing of the Karst Mitigation Plan requirement under § II.I.2.c, and the Board takes judicial notice that the DEP withdrew the proposed modification referenced in the Libertz Letter.
 - b. Whether ROCKWOOL submitted a Karst Mitigation Plan with the 2019 Reissuance Application

⁴ The Board notes that requiring a Karst Mitigation Plan may signify a substantive change in permitting requirements or conditions necessitating a re-registration.

⁵ The Board agrees with the EPA's objection.

33. In comments to the 2019 Reissuance Application submitted on January 21, 2020, Rick Adams directed ROCKWOOL to submit a stand-alone Groundwater Protection Plan and stated: "II.I.2.c requires the Karst Mitigation Plan (Structure [sic] Sinkhole Repair document as stated on Pg. 8 of SWPPP) is required [sic] to be part of the GPP." C.R. 1980. On or about January 27, 2020, ROCKWOOL complied with Adams' directive and updated its 2019 Reissuance Application to include a stand-alone Groundwater Protection Plan. C.R. 1482. Section 2.2.2 of that Groundwater Protection Plan discusses sinkhole repair and incorporates the Supplemental Sinkhole Repair Plan referenced in Adams' comment as Appendix A. C.R. 1488 & 1493-1496. That plan had been available to the public to review since it was first uploaded to ESS in October 2018. See, e.g., C.R. 2220.

i. The Groundwater Protection Plan Template

- 34. There is no statutory or regulatory definition of a Karst Mitigation Plan and, in its absence, the Appellants rely on a document entitled "Format for the Groundwater Protection Plan" (the "GPP Template") Appellants' Ex. 93. Section J of the GPP Template is entitled "Karst Mitigation Plan" and contains ten "design requirements" prefaced by three preliminary statements (emphasis in original):
 - (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". [sic] This should be considered the minimum requirement and 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.
 - (c) Sinkhole Mitigation shall be carried out according to the WVDEP Sinkhole Mitigation Guidance Document (August

2005, revised 2018), or other applicable standards as recommend by the G or PE and approved by the West Virginia Department of Environmental Protection (WVDEP).

- 35. Rick Adams and Yogesh Patel testified on Hearing Day 2 that they did not recall having seen the GPP Template before that day. Day 2 Hr'g Tr. 75:18-75:21 (Adams) & 169:13-169:16 (Patel). Adams testified, however, that the preliminary and detailed site investigation referenced in ¶¶ (a) and (b) of the GPP Template would be performed before construction starts. Day 2 Hr'g Tr. 68:22-69:15. Adams further testified that the window for ROCKWOOL to perform such an investigation had been closed for nearly two years by the time it submitted the 2019 Reissuance Application. Day 2 Hr'g Tr. 70:15-70:19.
- 36. Subsequent testimony on Hearing Day 3 noted the GPP Template had been prepared by Larry Board in response to questions from permittees and consultants about the requirement for a GPP under the 2019 General Permit. See Board Dep. Tr. 47:5-47:18 & 48:1-48:5.
- 37. Board testified he did not have the responsibility or authority for preparing guidance documents or DEP policy, nor was he tasked by any of his supervisors with preparing the GPP Template. Board Dep. Tr. 113:16-113:21 & 122:9-122:11. He testified his immediate supervisor, Yogesh Patel, was not aware he had prepared the GPP Template or caused it to be posted to the DEP's website. Board Dep. Tr. 116:23-117:8 & 122:9-122:14. Patel, Board, and Rick Adams and all agreed that the GPP Template had not gone through the statutory rulemaking process, it did not represent DEP policy, and it had no regulatory force. Day 2 Hr'g Tr. 19:9-20:8 (Adams) & 169:17-170:20 (Patel); Board Dep. Tr. 121:20-122:22 (Board). Scott Mandirola, the Deputy Director of External Affairs for DEP, similarly testified that the GPP Template had not

gone through the rulemaking process, nor had the CSN Bulletin referenced in Section J. Day 3 Hr'g Tr. 38:2-38:21 & 59:6-59:13. Mandirola further testified that DEP policy affecting Groundwater Protection Plans in the Eastern Panhandle of West Virginia would need to have been approved by Yogesh Patel, as the head of the NPDES Permitting Division, and Kathy Emery, as Director of the Division of Water and Waste Management. Day 3 Hr'g Tr. 36:5-36:15.

38. As for the GPP Template itself, Board testified that he spent three to four lunch hours looking for a suitable document on the internet that he could use as a template. Board Dep. Tr. 109:11-18. He could not recall where he found the original template, nor which modifications he made to make it applicable to West Virginia. Board Dep. Tr. 43:8-43:10, 47:19-47:24 & 48:6-48.10. He estimated that he spent a week or two, working during his free time, to complete the process. Board Dep. Tr. 108:8-108:23. Board testified that he did not have formal training in the development of Best Management Practices specific to karst, such as would be required to evaluate the standards under Section J of the GPP Template, nor did he consult anyone with that background or experience. Board Dep. Tr. 115:9-116:12. Board also was clear that, although he had sent Rick Adams a copy of the GPP Template in March 2019, none of his colleagues submitted any written comments or redlines. Board Dep. Ex. 49H & Board Dep. Tr. 112:1-112:4. Board did not submit it to his supervisors for review, and so he did not receive any comment or feedback from them. Board Dep. Tr. 112:5-112:11. And Board did not submit it to review by internal DEP councils or to external environmental, industry, or academic groups. Board Dep. Tr. 112:20-113:11. Board's testimony was that no one else assisted him with identifying, modifying, or reviewing the GPP Template. Board Dep. Tr. 48:1-48:5. Board had not provided any formal notice that the GPP Template had been prepared or uploaded to the DEP website. Board Dep. Tr.

117-15-118:23. He did not inform the permit reviewers. Board Dep. Tr. 117:15-117:17. He did not inform industry, environmental, consulting, or academic organizations. Board Dep. Tr. 117:19-118:20. He also did not inform current permittees. Board Dep. Tr. 118:13-118:14. As Board testified, the only way someone would have known that the GPP Template existed is if they had been specifically informed or had stumbled upon it on the DEP website. Board Dep. Tr. 117:24-118:4.

39. Concerning the GPP Template, the Appellants moved the admission of two screenshots from ESS relating to an application by the West Dunbar Public Service District for coverage under the 2019 General Permit (the "West Dunbar PSD Application"). See Appellants' Exs. 137 & 138. Each exhibit is entitled "Section J: GPP Section J," each exhibit contains the same ten "design requirements" from the GPP Template, and each exhibit shows an application effective date of April 21, 2020. Id. But the West Dunbar PSD Application post-dates the approval of the 2019 Reissuance Application, and there was no testimony that the inclusion of Section J in ESS was authorized by Yogesh Patel or Kathy Emery.

ii. Sinkhole Mitigation Plan as an Element of a Karst Mitigation

Plan

40. Rick Adams, who reviewed ROCKWOOL's 2019 Reissuance Application, testified that he received on-the-job training about karst mitigation when the DEP started to request Karst Mitigation Plans for major pipeline projects in 2017. Day 1 Hr'g Tr. 220:5-220:8 (read topline as pipeline). He also testified to reading Karst Mitigation Plans, doing independent research, and consulting with Nick Shear and Justin Painter, two DEP geologists. Day 1 Hr'g Tr. 220:11-221:3. Adams testified that "the most important quality of a Karst Mitigation Plan is ... if

a sinkhole is present or a sinkhole develops during the construction process, how will you handle stormwater associated with the construction activities." Day 1 Hr'g Tr. 211:6-211:10. Specific to the 2019 Reissuance Application, Adams also testified to having gathered information about sinkholes at the site, as well as information about dye tests. Day 1 Hr'g Tr. 221:9-221:19. Adams testified that ROCKWOOL's Supplemental Sinkhole Repair Plan was an improvement on the DEP's own guidance document. Day 2 Hr'g Tr. 65:23-66:10. He also testified that ROCKWOOL's decision to line the rainwater reuse and stormwater ponds represented karst mitigation measures. Day 1 Hr'g Tr. 228:14-228:22.

41. Larry Board, who prepared the GPP Template cited by the Appellants as the standard for a Karst Mitigation Plan, testified that his purpose in referencing the CSN Bulletin in that document was to direct applicants to review and understand it. Board Dep. Tr. 58:5-58:22. Board also identified a number of Best Management Practices that applicants can employ to protect surface and groundwater, such as silt fences, compost filter socks, straw waddles, rock check dams, and sediment traps and basins. Board Dep. Tr. 66:6-66:20. Board, who approved the 2019 Reissuance Application, further testified that Adams' acceptance of a sinkhole mitigation plan as a Karst Mitigation Plan was consistent with his own practice. Dep. Tr. 103:15-103:21. Like Rick Adams, whom he supervises, Board testified that he considered a sinkhole mitigation plan to qualify as a Karst Mitigation Plan. Board Dep. Tr. 17:22-17:24 & 29:21-24. Board testified that he considered a sinkhole mitigation plan and a Karst Mitigation Plan to be synonymous. Board Dep. Tr. 129:7-129:8.

⁶ The Board notes that sinkholes are a component of karst geomorphology, but do not encompass all aspects of karst. Sinkhole mitigation should be an element of a Karst Mitigation Plan, but not substituted for a full Karst Mitigation Plan.

- 42. Andrew Parsons, another permit reviewer under Larry Board's supervision, has a Master's in Environmental Science from Marshall University and more than 20 years' experience in the environmental health and safety industry. Parsons Dep. Tr. 8:14-8:17 & 10:3-10:6. He testified that he voluntarily takes continuing education classes in stormwater management and holds two certifications; Certified Professional Erosion & Sediment Control and Certified Professional Municipal Stormwater Manager. Parsons Dep. Tr. 27:21-28:1 & 29:4-29:7. Parsons' testimony was that sinkholes represent the primary conduit for water into underground aquifers, and he agreed with Adams and Board that a sinkhole mitigation plan is synonymous with a Karst Mitigation Plan. Parsons Dep. Tr. 19:8-20:3.
- 43. Dr. Christopher Groves and Dr. Timothy Bechtel, who were qualified as experts on karst landscapes, both highlighted the significance of sinkholes to stormwater. Dr. Groves noted succinctly that "where you have sinkholes, you have karst and you have ... the potential for these environmental problems." Day 1 Hr'g Tr. 17:18. He also specifically identified sinkholes as one of two challenges for development in Jefferson County, with the other being rapid infiltration of stormwater through soils. Day 1 Hr'g Tr. 68-21-69:13. Dr. Bechtel similarly testified that the key to safe development in karst is preventing concentrated infiltration, which will prevent the development of sinkholes that create structural issues and pathways for contaminants to enter the groundwater. Bechtel Dep. Tr. 13:16-24, 14:14-16:4 & 16:19-17:1. In his opinion, "the most important aspect of mitigation in karst is preventing sinkholes in the first place, because once something gets into the aquifer, it's gone ... The most important thing is putting in place practices to prevent sinkholes." Bechtel Dep. Tr. 45:20-46:4.

3. Construction Progress and Performance

- 44. Peter Regenberg testified that ROCKWOOL is done with construction on site and expects to terminate coverage under the 2019 General Permit when vegetation meets the permit standards, likely in May or June 2021. Day 4 Hr'g Tr. 20:10-21:7.
- 45. During the course of construction, ROCKWOOL identified 22 sinkholes. See, e.g., Day 1 Hr'g Tr. 241:16-242:1. Dr. Timothy Bechtel testified that sinkholes are quite common in karst because grading activity can change the way that water moves through the environment. Bechtel Dep. Tr. 45:2-45:5. Rick Adams testified that each sinkhole has since been repaired. Day 2 Hr'g Tr. 51:6-51:12.
- 46. When the first sinkhole was identified, ROCKWOOL failed to timely report it and received a notice of violation ("NOV") for this and five other issues on September 11, 2018. Appellants' Ex. 29. DEP and ROCKWOOL then worked together to develop the Supplemental Sinkhole Repair Procedure submitted in October 2018. Day 1 Hr'g Tr. 216:3-216:8. The DEP has not issued any additional NOVs to ROCKWOOL. Day 2 Hr'g Tr. 54:2-54:5. Tommy George, one of the inspectors responsible for monitoring compliance at the ROCKWOOL facility, testified that a single NOV would be low for a project of its size. Day 2 Hr'g Tr. 138:10-138:14. Travis Hays, the other DEP inspector who testified, described ROCKWOOL's environmental performance as "above par." George similarly noted that ROCKWOOL took environmental compliance seriously and was proactive in calling him to provide notice of sinkholes and their planned repair. Day 2 Hr'g Tr. 113:10-113:15 (Hays) & 136:22-137:20 (George). Both Hays and George testified that they would have written additional NOVs if they had been warranted. Day 2 Hr'g Tr. 112:14-112:21 (Hays) & 138:15-138:19 (George).

47. The Appellants did not introduce any evidence that environmental or ecological harm had resulted from the sinkholes or the presence or absence of any stormwater controls. Their expert, Dr. Christopher Groves, specifically stated that he could not offer opinions on the risk and potential significance of any groundwater contamination, nor could he offer opinions on the relationship between any such risk and the stormwater controls implemented at the site. Day 1 Hr'g Tr. 122:14-122:21, 132:8-132:16 & 138:12-138:19. And though Dr. Groves did testify that the introduction of contaminants into the groundwater could harm the Madison Cave Isopod, a threatened species under federal law, he did not opine that the Madison Cave Isopod was present at the site or had actually been harmed. See Day 1 Hr'g Tr. 113:20-114:2.

CONCLUSIONS OF LAW

A. Standard of Review

- 48. The Appellants' right to appeal is conferred by the state Water Pollution Control Act ("WPCA") and state Groundwater Protect Act ("GPA"). Under the State WPCA, "[a]ny person ... aggrieved by the terms and conditions of a permit granted under the provisions of this article, may appeal to the environmental quality board, pursuant to the provisions of article one, chapter twenty-two-b of this code." W. Va. Code § 22-11-21. Similarly, under the State GPA, "[a]ny person ... who is aggrieved ... by the issuance or denial of a permit issued to implement this article or by such permit's term or conditions ... may appeal to the environmental quality board as provided in article one, chapter twenty-two-b of this code." W. Va. Code § 22-12-11.
- 49. Under W. Va. Code § 22B-1-7(e) & W. Va. Code R. § 46-4-6.8, the Board conducts a *de novo* review of the Appellants' specific objections. The Appellants bear the burden of production and persuasion. *See, e.g.*, W. Va. Code R. § 46-4-6.8.

50. Upon consideration of the testimony and evidence presented during the evidentiary hearing, together with the certified record submitted by the DEP, 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, or shall make and enter an order approving or modifying the terms and conditions of any permit issued." W. Va. Code § 22B-1-7(g)(1). The Board's order must also consider the "economic feasibility" of any relief. W. Va. Code § 22B-1-7(h).

B. Construction Stormwater General Permitting Program

- 51. The DEP is responsible under the State WPCA for administering the National Pollutant Discharge Elimination System ("NPDES") program, 33 U.S.C. § 1342, as part of its delegated authority from the EPA under the Federal Water Pollution Control Act, 33 U.S. C. § 1251 et. seq. (the "Federal CWA"). W. Va. Code § 22-11-4(a)(1).
- 52. The DEP is responsible under the State GPA for protecting the State's groundwater. W. Va. Code § 22-12-4 et seq. In contrast to the State WPCA, which is intended in part to administer the federal NPDES program under delegation from the EPA, the DEP has "the sole and exclusive authority" over the State GPA. *Id*.
- 53. The DEP issued the 2012 General Permit and the 2019 General Permit to enforce Water Quality Standards under the State WPCA, see W. Va. Code R. § 47-2-1 et seq., and Groundwater Standards under the State GPA, see W. Va. Code R. § 47-2-12 et seq. C.R. 728 (2012 General Permit) & 2075 (2019 General Permit).

C. Specific Objections

1. Pre-2019 Reissuance Application Objections

54. The Board concludes that it lacks jurisdiction over the Appellants' specific objections directed to acts or omissions predating the 2019 Reissuance Application. The Board's jurisdiction is limited to a review of the permit that was appealed. See W. Va. Code § 22-11-21 and W. Va. Code § 22-12-11. Here, that permit is the reissuance approved under the 2019 General Permit. The Board cannot review any alleged acts or omissions associated with the registration under the 2012 General Permit, nor can the Board grant relief based on permit terms and conditions that have been superseded by the 2019 General Permit.

2. 2019 Reissuance Application Objections

a. Whether a Karst Mitigation Plan Was Submitted

- 55. The Board concludes that ROCKWOOL provided sufficient information to satisfy DEP's requirement for a Karst Mitigation Plan with its 2019 Reissuance Application.
- 56. In comments submitted on the 2019 Reissuance Application in January 2020, Rick Adams directed ROCKWOOL to submit its Supplemental Sinkhole Repair Plan as its Karst Mitigation Plan. ROCKWOOL did just that several days later, submitting a stand-alone Groundwater Protection Plan that incorporated that Supplemental Sinkhole Repair Plan as Appendix A. This issue accordingly turns in part on a definitional dispute: whether ROCKWOOL's Supplemental Sinkhole Repair Plan qualifies as a Karst Mitigation Plan.
- 57. The 2019 General Permit does not define the term "karst mitigation plan," and there is no statutory or regulatory definition either. It is significant, however, that each DEP employee who testified to having provided input into the 2019 General Permit considered a

"karst mitigation plan" to be synonymous with a sinkhole mitigation plan when considering this site. The authors' understanding of their own work should be given significant weight by the Board.

- 58. The Board is also persuaded by the testimony of Dr. Timothy Bechtel, who emphasized the significance of sinkhole prevention and management to protecting karst. Dr. Bechtel made the connection between sinkhole mitigation and karst mitigation, testifying that "the most important aspect of mitigation in karst is preventing sinkholes in the first place, because once something gets into the aquifer, it's gone." Bechtel Dep. Tr. 45:20-45:23. Testimony from Dr. Bechtel supports the DEP's acceptance of ROCKWOOL's Supplemental Sinkhole Repair Plan as its Karst Mitigation Plan for this site or location.
- 59. Though the submission of a sinkhole mitigation plan is sufficient for the Board's conclusion as this site, given that it addresses the primary concern for karst, it also notes that ROCKWOOL addressed Dr. Groves' and Dr. Bechtel's secondary concern for infiltration in karst. ROCKWOOL installed a three-liner system for its permanent rainwater reuse and stormwater ponds that exceed the Chesapeake Bulletin recommendation by two factors of safety, and Rick Adams testified without rebuttal that he considered this system to be part of ROCKWOOL's Karst Mitigation Plan.
- 60. The Board is not persuaded by the Appellants' argument, presented first through Dr. Groves and then through the GPP Template, that a Karst Mitigation Plan requires applicants to perform and then discuss a preliminary and detailed site investigation incorporating dye tracing. This notion is at odds with the definition of "mitigation," which is "the process or result of making something less severe, dangerous, painful, harsh, or damaging." Mitigation,

Merriam-Webster.com Dictionary, available at https://bit.ly/3eCytkp (last accessed Apr. 27, 2021). It also is not supported by any statute or rule, and the Board finds the GPP Template to be wholly unpersuasive for two independent reasons.

- 61. First, the GPP Template is not official guidance and it has not been promulgated as a legislative rule and, under West Virginia law, cannot be enforced by either the DEP or the Board. See W. Va. Code § 29A-3-2(b).
- 62. Second, even if the Board overlooked the fact that the GPP Template was not subjected to rulemaking, it is not entitled to any weight or deference. The Supreme Court of Appeals has held that guidance or policy lacks the force of law; rather it is "entitled on judicial review only to the weight that [its] inherent persuasiveness commands." Appalachian Power Co. v. State Tax Dep't, 195 W. Va. 573, 583, 466 S.E.2d 424, 434 (1995). That weight will "depend upon the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade, if lacking power to control." Id. (quoting Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944)). The unrebutted evidence is that the GPP Template was prepared by single DEP employee from a document of unknown provenance or reliability, found from an internet search over two to three lunch hours and then modified off and on over the next one to two weeks. That employee not only lacked the authority to prepare the GPP Template, he had no specific expertise to judge the karst-specific measures and then failed to consult anyone who did, just as he failed to inform anyone in his chain-of-command that he had caused the GPP Template to be uploaded to the DEP website.

Application included an attachment to the Groundwater Protection Plan entitled "karst mitigation plan." But the Board will not place form over substance. It is mindful that ROCKWOOL did what the DEP requested: it submitted its Supplemental Sinkhole Repair Plan as its Karst Mitigation Plan. And for the reasons discussed above, the Board concludes at this ROCKWOOL site the Supplemental Sinkhole Repair Plan qualifies as a Karst Mitigation Plan under the 2019 General Permit.

b. Whether a Karst Mitigation Plan Was Required

- 64. ROCKWOOL argued in summation that it was not required to submit a Karst Mitigation Plan with its 2019 Reissuance Application because the 2019 General Permit requires a Karst Mitigation Plan only of registration applications, and it submitted a reissuance application. The Appellants argued that this interpretation of the 2019 General Permit would represent an unlawful continuation of the 2012 General Permit. As noted above, in light of its conclusion that ROCKWOOL in fact submitted a Supplemental Sinkhole Repair Plan meeting the needs of a Karst Mitigation Plan at this site, the Board finds it unnecessary to resolve this dispute.
- 65. The Board concludes the DEP requires industrial facilities to consider karst under W. Va. Code R. § 47-58-4.10, and ROCKWOOL met that obligation by undertaking a number of karst-specific measures for site investigation and design.

3. Human, Ecological, and Environmental Harm

- 66. The Board concludes that the Appellants did not meet their burden of proving human, ecological or environmental harm from the presence or absence of any stormwater controls approved under the 2019 Reissuance Application.
- 67. Dr. Christopher Groves, the only one of Appellants' witnesses to address this issue, spoke at most in terms of potential and admitted that he was not qualified to offer testimony on the risk of groundwater contamination or its relationship to the Best Management Practices employed at the site. Dr. Groves similarly failed to demonstrate that the Madison Cave Isopod was actually present at the site, let alone that it had been harmed by construction activity.

ORDER

For the reasons set forth above, the Board hereby **ORDERS** that the DEP's approval of the 2019 Reissuance Application is **AFFIRMED** and this appeal is hereby **DISMISSED**.

The Board, however, does recommend the DEP consider developing official guidance documents addressing stormwater construction permits and karst terrain.

The Clerk is directed under W. Va. Code R. § 46-4-6.11 to send a copy of this order to the parties and their attorneys by registered or certified mail and to cause it to be published in the State Register in accordance with W. Va. Code § 29A-2-9.

ENTERED this 27th day of October 2021.

West Virginia Environmental Quality Board

Dr. Edward Snyder, Chairman

ENVIRONMENTAL QUALITY BOARD WEST VIRGINIA

NOTICE OF RIGHT TO APPEAL FINAL ORDER

In accordance with §22B-1-7(j) of the West Virginia Code, you are hereby notified of your right to judicial review of this FINAL ORDER in accordance with §22B-1-9(a) and §22B-3-3 of the West Virginia Code. If appropriate, an appeal of this final order may be made by filing a petition in the appropriate court within thirty (30) days from your receipt of this final order in the manner provided by §29A-5-4 of the West Virginia Code.

ENVIRONMENTAL QUALITY BOARD

THE JEFFERSON COUNTY FOUNDATION, INC., CHRISTINE L. WIMER, KAREN MICHELLE FREER, and CALVIN PERRY,

Appellants,

v.

Appeal Nos. 20-02-EQB

DIRECTOR, DIVISION OF WATER AND WASTE MANAGEMENT, DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Appellee,

and

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

Intervenor-Appellee.

300 Kanawha Boulevard, East

Charleston, WV 25301

CERTIFICATE OF SERVICE

I hereby certify that I, Jackie D. Shultz, Clerk for the Environmental Quality Board, have this day, the day of October, 2021, served a true copy of the foregoing Final Order via certified first-class								
U.S. Mail and hand delivery to the following:								
via certified first-class U.S. Mail to:								
Christopher P. Stroech, Esquire	Certified Mail: _	9489	0090	0027	PSOT	3754	37	
Arnold and Bailey, PLLC 208 N. George Street Charles Town WV 25414								
Joseph V. Schaeffer, Esquire Babst Calland Clements and Zomnir PC Two Gateway Center, 6 th Floor Pittsburgh, PA 15222	Certified Mail:	9489	0090	0027	P501	3754	48	
	•							
James A. Walls, Esquire Spilman Thomas & Battle, PLLC 48 Donley Street, Ste. 800 Morgantown, WV 26501	Certified Mail:	9489	0090	0027	P507	3754	55	
	•							
David L. Yaussy, Esquire Joseph C. Unger, Esquire Spilman Thomas & Battle, PLLC	Certified Mail:	9489	0090	0027	P507	3754	P5	
	•							

via Hand Delivery to:

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Katheryn Emery, P.E., Acting Director Division of Water and Waste Management WV Department of Environmental Protection 601 57th Street, S.E. Charleston, WV 25304

Jackie D. Shultz, Clerk