IN RE MUSKEGON DEVELOPMENT COMPANY

UIC Appeal No. 18-05

ORDER REMANDING IN PART AND DENYING REVIEW IN PART

Decided April 29, 2019

Syllabus

Mr. Emerson Joseph Addison III petitions the Environmental Appeals Board ("Board") to review an Underground Injection Control Class II Permit ("Permit") that the U.S. Environmental Protection Agency Region 5 ("Region") issued to Muskegon Development Company ("Muskegon") on July 3, 2018. The Permit authorizes Muskegon to convert an existing oil production well in Clare County, Michigan, for injection of fresh water to enhance oil recovery from Muskegon's other nearby oil production wells.

Mr. Addison's petition challenges the Region's permit decision on five grounds. Specifically, he challenges the Region's: (1) omission of responses to certain comments in the Region's response to comments document; (2) consideration of environmental justice; (3) consideration of preexisting risks to underground sources of drinking water; (4) response to comments on risks to aquifers from which water will be withdrawn; and (5) categorization of certain comments as outside the scope of the UIC permitting program.

Held: The Board remands the Permit in part and otherwise denies the petition for review. The Board holds that remand is warranted for the Region to address two issues. First, the current state of the Region's response to comments document substantially impedes a determination as to whether the Region considered and meaningfully responded to certain comments and so exercised its considered judgment in issuing the Permit. Second, the Board is unable to determine whether the Region appropriately evaluated the environmental justice implications of the permitting action. The Board denies the petition for review as to Mr. Addison's remaining arguments as he did not establish those arguments were preserved for review or he failed to establish that the Region had clearly erred or that review was otherwise warranted.

Before Environmental Appeals Judges Aaron P. Avila, Mary Kay Lynch, and Mary Beth Ward.

Opinion of the Board by Judge Avila:

I. STATEMENT OF THE CASE

In August 2018, Mr. Emerson Joseph Addison III filed with the Environmental Appeals Board ("Board") a petition for review of a decision by the U.S. Environmental Protection Agency ("EPA" or "Agency"), Region 5 ("Region") to issue an Underground Injection Control ("UIC") Class II permit ("Permit") to the Muskegon Development Company ("Muskegon"). Appeal of EPA Permit Decision on MI-035-2R-0034, Holcomb 1-22 Well (Aug. 10, 2018) ("Petition"). The Permit authorizes Muskegon to convert an existing oil production well in Clare County, Michigan, the Holcomb 1-22 well, for injection of fresh water to enhance oil recovery from Muskegon's other nearby production wells.

Mr. Addison's petition challenges the Region's permit decision on five grounds. Specifically, he challenges the Region's: (1) omission of responses to certain comments in the Region's response to comments document, Petition at 3-4; (2) consideration of environmental justice, *id.* at 4-6, 10-11; (3) consideration of preexisting risks to underground sources of drinking water, *id.* at 6-7; (4) response to comments on risks to aquifers from which water will be withdrawn, *id.* at 7-10; and (5) categorization of certain comments as outside the scope of the UIC permitting program, *id.* at 11-12. Briefing before the Board was completed in November 2018. For the reasons that follow, the Board remands the Permit on the first issue and remands in part on the second issue raised in Mr. Addison's petition. The Board otherwise denies review.

II. PRINCIPLES GOVERNING BOARD REVIEW

Section 124.19 of Title 40 of the Code of Federal Regulations governs Board review of a UIC permit. EPA's intent in promulgating these regulations was that this "review should be only sparingly exercised." Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980); see also In re Beeland Grp., LLC, 14 E.A.D. 189, 195-96 (EAB 2008).

In considering any petition filed under 40 C.F.R. § 124.19(a), the Board first evaluates whether the petitioner has met threshold procedural requirements, including, among other things, whether an issue has been preserved for Board review. See 40 C.F.R. § 124.19(a)(2)-(4); see also In re Seneca Res. Corp.,

¹ The pages in the petition for review are unnumbered. For ease of reference in this Order, the Board has assigned page numbers to the petition starting with the cover page as page 1. That pagination is consistent with the "Table of Authorities" in the petition and is consistent with the citation approach used by the Region and Muskegon in their briefs.

16 E.A.D. 411, 412 (EAB 2014). A petitioner satisfies the issue preservation requirement by demonstrating that the issues and arguments it raises on appeal were raised previously – either during the public comment period on the draft permit or during a public hearing. See In re Gen. Elec. Co., 17 E.A.D. 434, 445 (EAB 2018). If the Board concludes that a petitioner satisfies those threshold requirements, then the Board evaluates the merits of the petition for review. See Seneca Res., 16 E.A.D. at 412. If a petitioner fails to meet a threshold requirement, the Board typically denies or dismisses the petition for review. See, e.g., id. at 413-16.

In any appeal from a permit decision issued under part 124, the petitioner (even when not represented by legal counsel) bears the burden of demonstrating that review is warranted. See 40 C.F.R. § 124.19(a)(4); see also In re Archer Daniels Midland Co., 17 E.A.D. 380, 382-83 (EAB 2017). But where, as here, a petitioner is not represented by legal counsel, the Board endeavors to liberally construe the petition to fairly identify the substance of the arguments being raised. In re Sutter Power Plant, 8 E.A.D. 680, 687 (EAB 1999); see also In re Envtl. Disposal Sys., Inc., 12 E.A.D. 254, 292 n.26 (EAB 2005); In re Envotech, L.P., 6 E.A.D. 260, 268 (EAB 1996).

Under 40 C.F.R. § 124.19, the Board has discretion to grant or deny review of a permit decision. *See Archer Daniels Midland*, 17 E.A.D. at 383. The Board ordinarily denies a petition for review of a permit decision (and thus does not remand it) unless the petitioner demonstrates that the permit decision is based on a clearly erroneous finding of fact or conclusion of law, or involves a matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a)(4)(i)(A)-(B); *see, e.g., In re La Paloma Energy Ctr., LLC*, 16 E.A.D. 267, 269 (EAB 2014). To meet that standard, it is not enough for a petitioner to rely on previous statements of its objections during the administrative process leading up to the issuance of the permit, such as comments on a draft permit. A petitioner must demonstrate why the permit issuer's response to those objections (the permit issuer's basis for its decision) is clearly erroneous or otherwise warrants review. *See Beeland Grp.*, 14 E.A.D. at 196. In reviewing an exercise of discretion by the permitting authority, the Board applies an abuse of discretion standard. *See In re City of Palmdale*, 15 E.A.D. 700, 704 (EAB 2012).

A permit issuer must articulate with "reasonable clarity" the reasons supporting its conclusion and the significance of the crucial facts it relied upon when reaching its conclusion. *E.g.*, *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417 (EAB 1997). As a whole, the record must demonstrate that the permit issuer "duly considered the issues raised in the comments," responded to the comments in a meaningful fashion, and ultimately adopted an approach that "is rational in light

of all information in the record." *In re Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 342 (EAB 2002); accord In re West Bay Expl. Co., 17 E.A.D. 204, 222-23, 225 (EAB 2016); *In re City of Moscow*, 10 E.A.D. 135, 142 (EAB 2001); *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567-68 (EAB 1998), pet. for review denied sub nom. Penn Fuel Gas, Inc. v. EPA, 185 F.3d 862 (3d Cir. 1999).

III. LEGAL FRAMEWORK

A. The UIC Program and Class II Wells

The Safe Drinking Water Act ("SDWA") requires EPA to promulgate regulations for state underground injection control programs to protect underground sources of drinking water ("USDWs"). SDWA § 1421, 42 U.S.C. § 300h. EPA has promulgated such regulations, including minimum requirements for UIC permits. *See* 40 C.F.R. pts. 144-148. EPA administers the UIC program in states like Michigan that are not authorized to administer their own UIC program. *See* 40 C.F.R. §§ 144.1(e), 147.1151.²

The UIC program focuses on the protection of underground water that "supplies or can reasonably be expected to supply any public water system" from "any contaminant" that may be present as a result of underground injection activities. SDWA § 1421(d)(2), 42 U.S.C. § 300h(d)(2); see also 40 C.F.R. § 144.12(a). The purpose of the UIC regulations is to prevent the movement of fluids containing contaminants into USDWs if the presence of those contaminants may cause a violation of a primary drinking water regulation or otherwise adversely affect human health. See 40 C.F.R. § 144.12(a). "[A]II injection activities including construction of an injection well are prohibited until the owner or operator is authorized by permit." Id. § 144.31(a).

Injection wells fall into six classes. *Id.* §§ 144.6, 146.5. Class II wells are used to inject fluids for three different purposes – disposal of fluids from oil or gas production; storage of hydrocarbons; or, like the Holcomb 1-22 well at issue here, enhanced recovery of oil or natural gas. *Id.* § 144.6(b)(1)-(3).

² The UIC regulations use the term "Director" to describe the permitting authority. 40 C.F.R. § 146.3 (defining "Director"). Because this matter involves an EPA-administered program, the Board will refer to the "permit issuer" or the Region, as appropriate, in places where the regulations use the term "Director."

B. Executive Order on Environmental Justice

Executive Order 12,898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" ("Executive Order on Environmental Justice" or "Executive Order"), provides that federal agencies "make achieving environmental justice part of [their] mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of [their] programs, policies, and activities on minority and low-income populations." Exec. Order No. 12,898 § 1-101, 59 Fed. Reg. 7629, 7629 (Feb. 16, 1994). Federal agencies are to implement the Executive Order on Environmental Justice "consistent with, and to the extent permitted by, existing law." Id. § 6-608, 59 Fed. Reg. at 7632. While the Executive Order gives permitting authorities discretion to determine how best to implement its mandate within the confines of existing law, the Executive Order does not dictate any particular outcome in a permit decision. See id. § 1-103, 59 Fed. Reg. at 7630 (directing agencies to develop their own agency-specific strategy for incorporating environmental justice goals into their programs, policies, and activities); In re Energy Answers Arecibo, LLC, 16 E.A.D. 294, 325-26, 337 (EAB 2014); In re Pio Pico Energy Ctr., 16 E.A.D. 56, 91-92 & n.30 (EAB 2013).

IV. PROCEDURAL AND FACTUAL HISTORY

In February 2017, the Region issued a draft of the UIC Class II permit for the conversion of Muskegon's Holcomb 1-22 well together with a statement of basis. Region 5, U.S. EPA, Statement of Basis for Issuance of Underground Injection Control (UIC) Draft Permit (Feb. 1, 2017) (Administrative Record No. ("A.R.") 6) ("Statement of Basis"); Region 5, U.S. EPA, EPA Seeks Comments on Draft Underground Injection Permit 1 (Feb. 2017) (A.R. 26) ("Public Notice"). The draft permit proposed authorizing Muskegon to convert the Holcomb 1-22 well, an existing oil production well, into an injection well to enhance recovery from Muskegon's other nearby production wells. See Region 5, U.S. EPA, United States Environmental Protection Agency Underground Injection Control Permit: Class II, Permit Number MI-035-2R-0034, at 1 (Feb. 2017) (A.R. 7) ("Draft Permit"). Under the draft permit, Muskegon would enhance oil production in nearby wells through the injection of fresh water into the Holcomb 1-22 well. *Id.* Among other things, the draft permit proposed authorizing injection via the Holcomb 1-22 well into the Richfield Formation of the Detroit River Group at depths between 4948 and 5010 feet below the surface. Statement of Basis at 2; Draft Permit at 1 & pts. II.B.1.a, III.A, at 12, A-1. That injection zone is separated from the lowermost USDW by about 4484 feet of rock strata. Statement of Basis at 2. The draft permit proposed limiting the maximum injection pressure to 3238

pounds per square inch gauge. *Id.*; Draft Permit at 1 & pts. II.B.1.a, III.A, at 12, A-1.

As specified in the statement of basis accompanying the draft permit, the Region provided public notice of the opportunity for the public to submit comments on the draft permit until March 15, 2017. Public Notice at 1. After the Region reviewed the initial comments on the draft permit, the Region scheduled a public meeting for July 25, 2017, at Clare High School in Clare, Michigan, and provided a second public comment period. Region 5, U.S. EPA, *Hearing and Public Comment Period on Muskegon Development Company Request for an Underground Injection Well Permit* (June 2017) (A.R. 36); see Region 5, U.S. EPA, *Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well 1* (July 3, 2018) (A.R. 60) ("RTC"). The second public comment period was scheduled to end on July 28, 2017, but the Region extended that deadline to August 18, 2017. See RTC at 1.

In July 2018, the Region issued the final Permit, with no changes from the draft, together with its response to comments document.³ *Id.* at 16, 18. In the response to comments document, the Region organized the comments received in writing and those given orally at the public meeting into 27 comments on topics the Region considered "in scope" of the UIC Program's purview" and 15 comments on topics the Region considered "out of scope." *Id.* at 1-3. Mr. Addison commented on the draft permit and filed this petition for review of the Region's final Permit decision with the Board.

³ A copy of the final Permit has not been attached as an exhibit to the pleadings of any party in this proceeding. And despite the requirement for the administrative record to contain a copy of the final Permit, 40 C.F.R. § 124.18(b)(7), neither the certified index of the administrative record nor the full administrative record that the Region filed with the Board contains the final Permit. Because the Region represents that it made no changes between the draft permit and final Permit, *see* RTC at 16, and Mr. Addison does not argue otherwise, the Board cites to the *draft* permit in the administrative record for the purpose of reciting factual statements regarding the final Permit. The final Permit is publicly available on the Agency's website. U.S. EPA, *Documents for Class II Permit MI-035-2R-0034*, https://www.epa.gov/uic/documents-class-ii-permit-mi-035-2r-0034 (last visited Apr. 29, 2019).

V. ANALYSIS

As noted at the outset, Mr. Addison challenges the Permit on five bases. Petition at 3-12. Each of Mr. Addison's challenges are addressed in turn below. For the reasons that follow, the Board remands in part and otherwise denies review.

A. The Current State of the Region's Response to Comments Document Substantially Impedes a Determination as to Whether the Region Considered and Meaningfully Responded to Certain Comments and So Exercised Its Considered Judgment in Issuing the Permit

Mr. Addison argues in his petition for review that the Region's response to comments document fails to meet the requirements of 40 C.F.R. § 124.17 because the Region did not individually respond to three of what the Region listed as "in scope" comments at the beginning of the response to comments document. Petition at 1-2, 9; see also Petitioner Response Brief to Permittee/Respondent Muskegon Development Company and EPA Response Briefs to Petition No. 18-05, at 9 (Nov. 9, 2018) ("Reply"). On appeal, the Region argues that the response to comments document "reflects that EPA did consider and respond to the substance of the [c]omments" but that the comments were "not specifically identified" due to an "editing omission." EPA Response to Petition for Review 8 (Oct. 10, 2018) ("Region Br."). A remand to the Region on this issue is warranted because the current state of the Region's response to comments document substantially impedes a determination as to whether the Region considered and meaningfully responded to comments 24, 25, and 26.

The Region's response to comments document begins by listing, on one-and-a-quarter pages, comments on topics the Region classified as "out of scope" and "in scope" "of the UIC Program's purview." RTC at 2-3. The "out of scope" list of comments is an alphabetical list (from "a" to "o") where each letter is followed by a short or partial sentence. Similarly, the "in scope" list of comments is a sequentially numbered list (from "1" to "27") where each number is followed by a short or partial sentence. *Id.* Of relevance here are the following three items on the list of "in scope" comments:

- "24. Well casing failures;"
- "25. Structural failures inside injection wells are common;" and
- "26. Please protect the water supply."

Id. at 3.

Following the "in scope" and "out of scope" lists, the next fourteen pages of the Region's response to comments document individually describe, in a paragraph or more, and respond to, in a paragraph or more, "in scope" comments in numerical order.⁴ *See id.* at 3-16. In doing so, however, the Region skips the "in scope" comments numbered 24, 25, and 26 from the beginning of the document

⁴ As an example, for listed "in scope" comment "11. Area of Review not sufficiently protective of USDW's," the response to comments document later provides:

Area of Review not sufficiently protective of USDW's

Comment #11: The described Area of Review ("AoR") evaluation is not sufficient and neither the applicant nor EPA has demonstrated that the proposed fixed radius, assuming there is one, is appropriate to protect USDWs. The draft permit lists one (1) plugged and abandoned well within the 1/4-mile radius of the Area of Review (AOR). However, the MDEQ GeoWebFace map shows a plugged and abandoned well just north of the west edge of Decker Lake. This well appears to be within 1/4 mile of the Holcomb 1-22 well. If it is not, it is beyond the 1/4 mile by just a few feet, and given the extremely small radius of the area of review (AOR) that a permit applicant must address, it would be in keeping with the spirit of the law to include this well in the AOR as well.

Response #11: 40 C.F.R. § 147.1155 requires EPA to use a fixed radius AOR of no less than 1/4-mile for Class II wells in Michigan. EPA's technical review of the permit application included analysis of the engineering design of the injection well and cement plugs, evaluation of the site geology to determine the depth of the USDW and the suitability of rock formation(s) for injection, calculation of the maximum injection pressure, and a search for and evaluation of any operating or plugged wells within the AOR that penetrate the injection zone, to assure that USDWs are protected.

Regarding the plugged and abandoned well just north of the west edge of Decker Lake, EPA has reviewed the available data on GeoWebFace and has identified the well to be the McKenna et al-4, a well drilled in 1944 to a depth of 3840 feet. The well proved to be a dry hole (non-oil producing) that was adequately plugged and abandoned. The McKenna et al-4 well did not penetrate the injection zone of the proposed Holcomb 1-22 well, and therefore would not serve as a conduit for the migration of fluids into the USDW.

RTC at 7.

without explanation. *See id.* at 16. Instead, comment 27 ("There is insufficient information in the permit application to support a permit decision"), which was listed as "in scope," is identified subsequently as comment 24 and response 24 with a brief paragraph describing the comment and a brief paragraph providing the Region's response. *See id.* This comment and response identified as "24" is the final comment and response in the document. *See id.* In sum, the response to comments document begins with a list of 27 "in scope" comments (at pages 2-3), but the substantive portion of the response document that follows (at pages 3-16) individually recites, describes, and responds to only 24 of the listed "in scope" comments from the beginning of the response to comments document: comments 1 through 23 and comment 27.

The permitting regulations require that the Region issue a response to comments at the time the final permit decision is issued. 40 C.F.R. § 124.17(a). The response to comments must, among other things, "[b]riefly describe and respond to all significant comments on the draft permit * * * raised during the public comment period, or during any hearing." *Id.* § 124.17(a)(2). The regulations do not prescribe a format that the Region must use in the response to comments, and the requirement to briefly respond to all significant comments "does not require a Region to respond to each comment in an individualized manner," nor do the responses need to match the length or level of detail of the comments. In re NE Hub Partners, L.P., 7 E.A.D. 561, 583 (EAB 1998), pet. for review denied sub nom. Penn Fuel Gas, Inc. v. EPA, 185 F.3d 862 (3d Cir. 1999). Thus, the Region has substantial discretion in how it structures its response to comments. And it is generally sufficient for a response to comments to "succinctly address[] the essence of each issue raised," id., so long as the response "address[es] the issues raised in a meaningful fashion" and is "clear and thorough enough to adequately encompass the issues raised by the commenter," In re Wash. Aqueduct Water Supply Sys., 11 E.A.D. 565, 585 (EAB 2004).

In light of this discretion, the Board has routinely upheld response to comments documents that "group related comments together and provide one unified response for each issue." *NE Hub*, 7 E.A.D. at 583; *see*, *e.g.*, *In re Russell City Energy Ctr.*, *LLC*, 15 E.A.D. 1, 100-01 (EAB 2010); *In re Circle T Feedlot*, 14 E.A.D. 653, 674-75 (EAB 2010). Grouping related comments into a unified response is "an efficient technique, not an indication of unresponsiveness," especially given the regulation's call for brevity when describing and responding to comments. *NE Hub*, 7 E.A.D. at 583; *see Russell City Energy Ctr.*, 15 E.A.D. at 101.

A Region similarly has discretion in how it presents its response to a comment (or group of comments). For example, in *Dominion Energy*, the Region chose not to duplicate responses each time they arose and instead wrote in response to some comments that the topic was discussed in more detail elsewhere in the response to comments document. *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 529-30 & n.62 (EAB 2006). In addressing an objection that the Region did not cross-reference where the discussions could be found, the Board upheld the Region's approach, noting that "there is no requirement in the regulations that, where the Region's response to a comment relies, at least in part, on its response to another comment, it must explicitly cross-reference such other response by page number or otherwise." *Id.* at 528-30.

At the same time, the Region's discretion to choose how it presents its response to a comment is not unlimited. As the Board observed in *Dominion Energy*, "[i]f cross-referencing ambiguities were to render a response to comments document incoherent, then there might be an issue." *Id.* at 530. And in *Dominion Energy*, while the Board concluded that the Region's "approach [was] discernable" for the most part, *id.*, the Board did remand the permit as to one comment because the Board could not find a response to that comment that the Region stated was "discussed in greater detail elsewhere," *id.* at 589.

Applying those principles here, the Board is stymied in its ability to determine whether the Region considered and responded to comments 24, 25, and 26 and otherwise exercised its considered judgment in issuing the Permit. And it is understandable that the public, including this petitioner, was similarly hindered in its ability to ascertain whether the Region considered and responded to comments 24, 25, and 26. A remand is therefore warranted because the current state of the Region's response to comments document substantially impedes a determination as to whether the Region considered and meaningfully responded to the listed "in scope" comments 24, 25, and 26.

As noted above, the Region gave a numbered list of comments in short or partial sentences and then – as to "in scope" comments 1 to 23 and 27 – described each comment and responded to each comment individually in full paragraphs or more. But, departing from its own approach, the Region omitted individual descriptions of, and responses to, "in scope" comments 24, 25, and 26. And unlike in *Dominion Energy*, nowhere in this response to comments document does the Region state that responses to "in scope" comments 24, 25, and 26 are addressed elsewhere in the document. Those unexplained omissions vary from the approach the Region otherwise took and leave the Region's response to comments document

without a discernable articulation of comments 24, 25, and 26 and the Region's responses thereto.⁵

The Region's partial articulation of its rationale in response to Mr. Addison's petition does not cure deficiencies in the response to comments document that the Region issued contemporaneously with the Permit. In his petition, Mr. Addison points out that the Region identified 27 "in scope" comments, but that the Region's detailed descriptions and responses ended at comment and response 24. Petition at 3-4. Apparently not realizing that comment 27 had been renumbered and addressed as comment and response 24, Mr. Addison's petition identifies as omitted comments and responses 25, 26, and 27. *Id.* In response, the Region argues on appeal that the substance of comments 25 and 26 were responded to in other responses. Region Br. at 8-11. Specifically, the Region states that the substance of comment 25 ("Structural failures inside injection wells are common") was responded to in the responses to three other comments: "10. Well design and construction inadequate to protect Underground Sources of Drinking Water (USDW's)," "12. Surface casing is not deep enough to protect USDW's," and "23. Injection well failure rate." *Id.* at 8-9. And the Region states that the substance of comment 26 ("Please protect the water supply") was responded to in the responses to three different comments: "5. Ground water contamination," "6. Leak accident response," and "21. Risk of water pollution at the well." *Id.* at 9. As to comment 27, the Region points out that comment 27 was in fact described and responded to in the substantive portion of the response to comments document, albeit under a different number (specifically, comment 24).

But the Region does not acknowledge the absence of a comment and response to what was comment 24, leaving unexplained where in the response to comments document a description or a response to "in scope" comment 24 may be found. And while the Region argues on appeal that the *responses* to "in scope" comments 25 and 26 may be found in the responses to other individually responded to comments in the body of the response to comments document, it is unclear whether the Region's responses to those other comments addressed comments 25 and 26 because, in part, the Region did not include in the response to comments

⁵ The Board has recognized that one purpose of the response to comments is to inform the public of the permitting authority's rationale for changes from a draft to final permit. *See In re ConocoPhillips Co.*, 13 E.A.D. 768, 780, 783 (EAB 2008). Likewise, the response to comments informs the public why the permitting authority did not make changes from a draft to final permit in response to issues raised in comments.

document an adequate description of how and whether comments 25 and 26 were addressed.

It may well be that the Region considered comments 25 and 26 alongside its consideration of comments 5, 6, 10, 12, 21, and 23, as stated in the Region's brief. See Region Br. at 8-9. Or it may well be, as Muskegon argues on appeal, that the Region ultimately determined the comments were not significant under 40 C.F.R. § 124.17(a)(2).⁶ Muskegon Development Company's Response to Petition No. 18-05, at 11-14 (Oct. 19, 2018) ("Muskegon Br."). However, neither of those approaches is discernable from the response to comments document issued, as required by 40 C.F.R. § 124.17, at the time of the final Permit decision. The Region cannot overcome a failure to meaningfully consider and address significant comments when issuing the final Permit by supplying articulations on appeal to the Board. See In re West Bay Expl. Co., 17 E.A.D. 204, 224-25 (EAB 2016); accord In re Chem. Waste Mgmt. of Ind., Inc., 6 E.A.D. 144, 151-52 (EAB 1995) (remanding permit and declining to accept argument advanced for first time on appeal that was not supported by the record).

To reiterate, the Region is not required to give individual point-by-point responses to each comment and the Board has upheld permits where unified responses were given to groups of related comments so long as the responses addressed the essence of each significant issued raised. *See Dominion Energy*, 12 E.A.D. at 529-30; *In re Hillman Power Co.*, 10 E.A.D. 673, 695-97 & n.20 (EAB 2002); *NE Hub*, 7 E.A.D. at 582-84. However, whatever the Region's approach, the response to comments document must demonstrate that the Region considered and responded to all significant comments. Based on the current response to comments document, the Board is substantially impeded in determining whether the Region did that and considered and responded to what it listed as "in scope" comments 24, 25, and 26 and so exercised its considered judgment in issuing the Permit.⁷

⁶ The Board notes that the Region does not argue before the Board that it made a conclusion that these comments were not significant under 40 C.F.R. § 124.17(a)(2).

⁷ Issues regarding the certified index to the administrative record in this case reinforce the need to remand the Permit for the Region to address comments 24, 25, and 26. The Region is required to file with the Board "a certified index of the administrative record, and the relevant portions of the administrative record within 30 days after the filing of a petition." 40 C.F.R. § 124.19(b)(2). As noted above, *supra* note 3, the final Permit was not on the certified index filed with the Board. And further, although the final Permit

The Board therefore remands the Permit for the Region to address listed "in scope" comments 24, 25, and 26 and to take further action, if appropriate.

B. Mr. Addison's Environmental Justice Arguments

A comment on the draft permit – "in scope" comment 20 – asked the Region to consider the high percentage of low-income population near the well site and claimed that this population has a higher rate of reliance on groundwater resources for drinking water than other populations. RTC at 13. The Region's response to that comment stated that one of the environmental justice ("EJ") screening factors "identified by EPA was that 56% of the local population were in the low income level." *Id.* For context, the entirety of the Region's response to comment 20 was:

EPA considers a number of factors in review of a permit application, including environmental justice (EJ) screening to identify areas where people are most vulnerable or may be exposed to different types of pollution, in order to assure that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies. *One of those EJ screening factors identified by EPA was that 56% of the local population were in the low income level.* Other factors include evaluation of the well design; plugging and abandonment plan; and, geological suitability of the rock formations for injection.

Id. (emphasis added).

Mr. Addison argues that the Region erred in its environmental justice review when issuing the Permit. He maintains that the Region's analysis of environmental justice issues should have considered additional demographic factors about the local area, Petition at 4-6, and that the response to comments on environmental justice was inadequate, *id.* at 11. The Region argues that the Board

and the response to comments document are dated July 3, 2018, the certified index filed by the Region was signed on June 25, 2018, which is prior to that date. Finally, the certified index lists dates for several documents that differ from the dates on the documents themselves. For example, the entry on the certified index for the Region's response to comments document has that document as being dated June 20, 2018, not July 3, 2018. While those errors in the certified index are not the basis for the Board's remand in this case, they do reinforce the need for the Region to take greater care in documenting its permitting decisions.

should dismiss these parts of the petition because they raise new issues that were not raised during the permitting process, they fail to confront the Region's response to comments, and the Region met any substantive requirements to consider and analyze environmental justice issues. Region Br. at 11-13. For the reasons that follow, the Board denies in part and remands in part Mr. Addison's environmental justice claims.

1. Mr. Addison Did Not Preserve for Review His Arguments Regarding Consideration of Certain Other Demographic Factors

Mr. Addison first argues that the Region's environmental justice screen should have considered the local population's education, disability status, health insurance status, veteran status, minority population, unemployment rate, household and household/per capita income, and reliance on tourism and agricultural industries. *See* Petition at 4-6, 11. As explained further below, some of these factors were used; for the other factors, the issue has not been preserved for review.

The EJ screen in the administrative record (dated August 18, 2016) did in fact examine some of the factors that Mr. Addison claims in his petition were not considered by the Region – minority population, low income population, population with less than high school education, and age of population. Region 5, U.S. EPA, *EJSCREEN Report* 3 (Aug. 18, 2016) (A.R. 1) ("EJ Screen Report").

With respect to the other factors, Mr. Addison fails to identify where in the comments on the draft permit those issues were previously raised. A petitioner before the Board must demonstrate, among other things, "that each issue being raised in the petition was raised during the public comment period (including any public hearing)." 40 C.F.R. § 124.19(a)(4)(ii); see, e.g., In re Penneco Envtl. Solutions, LLC, 17 E.A.D. 604, 617-18 (EAB 2018); In re Seneca Res. Corp., 16 E.A.D. 411, 415 (EAB 2014). As the Board has previously explained, that regulation "is not an arbitrary hurdle, placed in the path of potential petitioners simply to make the process of review more difficult." In re BP Cherry Point, 12 E.A.D. 209, 219 (EAB 2005); accord In re City of Taunton Dep't of Pub. Works, 17 E.A.D 105, 122 (EAB 2016), aff'd, 895 F.3d 120 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (2019); In re City of Palmdale, 15 E.A.D. 700, 721 (EAB 2012). Instead, the requirement to raise comments during the permitting processes "serves an important function related to the efficiency and integrity of the overall administrative scheme." BP Cherry Point, 12 E.A.D. at 219; see also In re Encogen Cogeneration Facility, 8 E.A.D. 244, 249-50 (EAB 1999).

Here, Mr. Addison's petition fails to identify any comment during the public comment process that argued the Region should have included the additional demographic factors identified in his petition in the Region's EJ screen prior to issuing the Permit. The Board therefore concludes that Mr. Addison's claim regarding additional demographic factors he believes should have been considered has not been preserved and denies review.⁸

2. The Board Is Unable to Determine Whether the Region Appropriately Evaluated the Environmental Justice Implications of the Permitting Action

In his petition for review, Mr. Addison also maintains that the Region's reference to the EJ screening it prepared is an "inadequate" response to concerns raised about impacts on the low-income population in the well area. Petition at 11. According to the Region, its response to the comment and the EJ screen in the administrative record "detail EPA's consideration of EJ factors in issuing the Permit" and Mr. Addison has not met his burden to show that the Region's analysis is clearly erroneous. Region Br. at 13.

As previously stated, the Executive Order on Environmental Justice gives permitting authorities discretion to determine how best to implement its mandate within the confines of existing law. The Executive Order does not, however, dictate any particular outcome in a permit decision, and a Region's permitting role under the UIC program is limited to implementing the requirements of the SDWA and the UIC regulations promulgated under the SDWA. See In re Envotech, L.P., 6 E.A.D. 260, 280 (EAB 1996). Thus, as the Region correctly points out on appeal, Region Br. at 3, in *Envotech* the Board recognized that a Region has no authority to deny or condition a UIC permit where the permittee has demonstrated full compliance with the statutory and regulatory requirements, Envotech, 6 E.A.D. at 280. But the Board also explained in *Envotech* a point that the Region does not appear to have addressed in its response to comments document and does not acknowledge on appeal – that there are two areas where a Region has the discretion to implement the Executive Order on Environmental Justice: the "public participation" procedures of 40 C.F.R. part 124 and the UIC regulatory "omnibus authority." 6 E.A.D. at 281.

⁸ The Board notes that the record in this case indicates that the Region used the Agency's Environmental Justice Screening and Mapping Tool, which is publicly available. *See* U.S. EPA, *EJSCREEN: Environmental Justice Screening and Mapping Tool*, https://www.epa.gov/ejscreen (last visited Apr. 29, 2019).

First, a Region has discretion under the procedural regulations in 40 C.F.R. part 124 "to assure early and ongoing opportunities for public involvement in the permitting process," "if a Region has a basis to believe" that a proposed UIC permit "may somehow pose a disproportionately adverse effect on the drinking water of a minority or low-income population." *Id.* And second, under the UIC regulatory omnibus authority, a Region has authority to impose, on a case-by-case basis, conditions necessary to prevent the migration of fluids into underground sources of drinking water. *Id.* at 281-82; *see* 40 C.F.R. § 144.52(a)(9); *In re Beeland Grp., LLC*, 14 E.A.D. 189, 208 (EAB 2008). Under the UIC regulatory omnibus authority, the Region can ensure the protection of the USDWs, including those upon which the minority or low-income community may rely. *Envotech*, 6 E.A.D. at 280-81.9

As the Region noted in its response to comments document, an EJ screen was performed and it identified that 56% of the local population is considered low income. RTC at 13. The Region's response to comments document does not state, however, what implications this EJ screen result had, if any, for this permitting action. *See id.* The Region's brief before the Board similarly gives no explanation of what implication the EJ screen result had, if any, and merely states that the response to comments document and underlying EJ screen in the administrative record "detail EPA's consideration of EJ factors in issuing the Permit." Region Br. at 13.

Thus, the Region provides no explanation in response to comment 20 for how the results from the EJ screen are included, or not included, in its consideration. The administrative record does contain a "Review" table that states "EJSCREEN: there is one parameter > 20%: Low Income Population is 56%." Region 5, U.S. EPA, *Review of Geographic Factors Related to UIC Permit Issuance* 1 (Aug. 18, 2016) (A.R. 1). And an accompanying EJ screen report indicates that for low income population, the country-wide average is 35%, the EPA Region 5 average is 33%, and the state-wide average is 35%. EJ Screen Report at 1 (showing

⁹ The UIC regulatory omnibus authority does not, however, allow the Region to redress impacts on a minority or low-income population that are unrelated to the protection of USDWs. *See Envotech*, 6 E.A.D. at 281-82 ("The Region would not have the authority to redress impacts unrelated to the protection of [USDWs], such as alleged negative impacts on the community, diminution in property values, or alleged proliferation of locally undesirable land uses.").

EJ screen for three-mile ring centered at well site). ¹⁰ In particular, the Region leaves unanswered what implication(s), if any, the fact that 56% of the local population is considered low income has for this permitting action.

The Region cannot deny or condition a UIC permit based on environmental justice considerations where the permittee has demonstrated full compliance with the statutory and regulatory requirements. *Envotech*, 6 E.A.D. at 280. But in responding to a comment that the "[l]ow income population of the well area should be factored into the permit decision," the Region needed to do more than simply state that it had performed an EJ screen identifying that "56% of the local population were in the low income level." Specifically, it needed to then explain whether it considered the fact that 56% of the population is low income in its permitting action and whether and how it chose to exercise its discretion under the UIC permitting program through enhanced public participation and use of its UIC regulatory omnibus authority. The Board therefore remands the Permit for the Region to provide that explanation in response to comment 20 and to take further action, if appropriate, in light of that explanation.

C. Mr. Addison Did Not Preserve for Review His Argument Regarding Preexisting Risks to Underground Sources of Drinking Water

In what he terms an argument regarding preexisting risks to drinking water, Mr. Addison maintains that "[l]iterally the entire community relies on underground wells for their water supply." Petition at 6. He then cites recommendations from an EPA website that provides information on the importance of testing private drinking water wells for contaminants on a regular basis, especially when circumstances change, such as when there is "new construction or industrial activity" nearby. *Id.* at 6-7, 15 (citing U.S. EPA, *Protect Your Home's Water*, https://www.epa.gov/privatewells/protect-your-homes-water (last visited Apr. 29, 2019)). Mr. Addison asserts that "[t]he people who live here just don't have the money to afford the tests that the EPA says they need to protect themselves and

¹⁰ The Region's brief states that "the underlying EJ Screen" is document 1 in the administrative record. Region Br. at 13. And the first four pages of the administrative record that the Region filed with the Board is in fact the EJ screen. Yet the certified index of the administrative record that the Region filed with the Board lists Muskegon's permit application as document 1. The certified index also does not otherwise list any document that seems to match or encompass the environmental justice screening. Again, as previously noted, *supra* note 7, while those errors are not the basis for the Board's remand in this case, they do reinforce the need for the Region to take greater care in documenting its permitting decisions.

their families from the risks of this project, risks such as contamination of their drinking water." *Id.* at 7. From that, Mr. Addison concludes the Region erred in issuing the Permit. The Region argues that the additional testing recommendation issue was not preserved for review and that the petition does not confront the Region's response on similar, or the same, issues. Region Br. at 13-14.

Mr. Addison's petition does not identify any comment during the public comment process that argued the Region should consider costs to homeowners of additional well testing prior to issuing the Permit, as required by 40 C.F.R. § 124.19(a)(4)(ii). *See* Petition at 6-7. That claim has therefore not been preserved for review. The Region did identify a comment asking whether "Muskegon Development Company [will] pay for regular water testing for nearby residents" as "out of scope" comment d. RTC at 2. But as to that comment, Mr. Addison's petition fails to demonstrate that the Region clearly erred when it determined that it was out of scope of the UIC permitting program or that review is otherwise warranted. The Board therefore denies review on this issue.

D. Mr. Addison Fails to Demonstrate Clear Error by the Region or That Review Is Otherwise Warranted Regarding Risks to Aquifers from Water Withdrawals

Mr. Addison makes three arguments that the Region's responses to comments on groundwater contamination issues are inadequate because they did not consider the effect Muskegon's withdrawal of groundwater to inject into the Holcomb 1-22 well would have on the characteristics of the affected aquifers. Petition at 7-10. As explained below, Mr. Addison's petition fails to demonstrate that the Region clearly erred regarding the issue of potential impacts to aquifers from groundwater withdrawals by Muskegon or that review is otherwise warranted. The Board addresses Mr. Addison's first two arguments as they are related and then turns to his third argument on this issue.

First, Mr. Addison identifies responses to comments by the Region that he argues are deficient because the responses did not consider issues associated with water withdrawal from aquifers. *Id.* at 7-10; *see, e.g., id.* at 8-9 (stating that response to comment 10 is inadequate "because it mentions nothing of how the act of water withdrawal might affect USDW's" and that responses to comments 11, 12, 21, 23, and 24 are inadequate because "[t]he responses to these comments make no mention of lowered water tables causing increased contaminants in residential wells, and they should do this simply for the sake of complete analysis of the problem").

Second, and along the same line as Mr. Addison's first argument, Mr. Addison challenges the Region's response to comment 13 – arguing that fresh

water should not be used for injection in lieu of brine at the Holcomb 1-22 well and that the Region should consider the aquifer from which the fresh water is coming. *Id.* at 9; *see* RTC at 9. Mr. Addison believes that "[i]f the EPA is going to approve this project, the EPA should address the issue of depleted aquifer levels causing water levels to drop or quantities of naturally occurring toxins to increase relative to the amount of water." Petition at 9.

With respect to those two arguments, the Region explained in its response to comment 13 that the SDWA and the UIC permitting program regulate risks to USDWs from injection activities and that it is Michigan that regulates groundwater including the volume or rate of groundwater withdrawals. RTC at 9. Put another way, consideration of aquifers from which the fresh water will be drawn is outside the scope of the SDWA and the UIC permitting program. It is therefore entirely consistent with the Region's reasoning – that it is Michigan, not the SDWA or the UIC permitting program, that regulates groundwater and the volume and rate of groundwater withdrawal – that the Region's response to other comments would not address risks to aquifers associated with withdrawal of water that Muskegon may use. Mr. Addison's petition fails to demonstrate that the Region clearly erred in its determination that the purview of the SDWA and UIC permitting program is limited to risks to USDWs from injection activities at the Holcomb 1-22 well and does not extend to risks to aquifers associated with withdrawal of water that Muskegon may use for injection at the Holcomb 1-22 well.

Third, Mr. Addison argues that the Region's response to comment 16, that injection wells can drain aquifers and cause earthquakes, is inadequate. Petition at 9-10; see RTC at 11. According to Mr. Addison, the Region's response to comment 16 on water withdrawals and seismicity is inadequate because it: (1) only addresses earthquakes and not other problems associated with draining an aquifer; (2) does not mention the criteria for the technical review of seismicity concerns associated with the Holcomb 1-22 well; (3) fails to define excessive high injection pressure and fluid volumes; and (4) concludes that studies of wells in Oklahoma cannot reasonably be extrapolated to the Holcomb 1-22 well in Michigan without providing relevant studies. Petition at 10. Mr. Addison's arguments fail to demonstrate any clear error by the Region, or that review is otherwise warranted.

With respect to Mr. Addison's first critique on water withdrawals and seismicity, as previously explained, the Region determined that the purview of the SDWA and UIC permitting program is limited to risks to USDWs from injection activities at the Holcomb 1-22 well and does not extend to risks to aquifers associated with withdrawal of water that Muskegon may use for injection at the

Holcomb 1-22 well. Mr. Addison's petition fails to demonstrate that the Region clearly erred in coming to this determination.

Mr. Addison's final three critiques of the Region's response to comment 16 on water withdrawals and seismicity are somewhat unrelated to his claim that the Region erred by not considering the effect on aquifers that Muskegon's withdrawal of groundwater to inject into the Holcomb 1-22 well might have. Instead, Mr. Addison's final three critiques seem directed at the Region's response to the comment's seismicity concerns. The Region's response to seismicity concerns are not, however, solely found in the response to comment 16. In addition to comment 16 and the Region's response to it, the Region also described and responded to at least two other comments related to seismicity: "15. Excessive injection into wells can cause earthquakes" and "17. Earthquake hazards from injection wells." RTC at 2, 10-11. To review the Region's consideration of seismicity concerns raised in comments, it is appropriate to consider those additional comments and the Region's responses when evaluating Mr. Addison's contentions.

For example, Mr. Addison argues that the response to comment 16 does not mention the criteria for the technical review of seismicity concerns; however, the Region explained its technical review in its response to comment 15. In that response, the Region explained that, according to historical data compiled by the U.S. Geological Survey ("USGS"), Clare County (where the Holcomb 1-22 well is located) is considered a low risk area regarding earthquakes. *Id.* at 10. The Region then noted that of the five historic earthquakes cited by the USGS in its website report on Michigan earthquake history, none were in Clare County and the depths of the earthquakes were determined by geologists to be more than 19,000 feet below ground, far deeper than any existing Class II injection wells. Id. Based on that data, and by using the EPA Injection-Induced Seismicity Decision Model flow chart, the Region concluded that "no seismicity concerns related to the proposed injection into the Holcomb 1-22 well were identified." *Id.*; see William K. Tong, U.S. EPA, Seismic Risk Evaluation, Permit No. MI-035-2D-0035 (Sept. 28, 2016) (A.R. 23) (documenting EPA permit writer's eleven page seismic risk evaluation, which includes the "Injection-Induced Seismic Decision Model for UIC Directors"). Thus, Mr. Addison's petition fails to demonstrate clear error by the Region with respect to the criteria for the technical review of seismicity concerns associated with the Holcomb 1-22 well.

With respect to Mr. Addison's argument that the response to comment 16 failed to explain what injection pressures might contribute to seismicity issues, the Region noted in response to comment 17 that "[t]he injection pressure and fluid volume for the proposed Holcomb 1-22 well in Michigan, combined with the

general lack of fault zones, are an unlikely scenario for injection-induced earthquakes related to the Holcomb 1-22 well." RTC at 11. Mr. Addison's argument ignores that the Region reviewed the permit application and included in the Permit a maximum injection pressure of 3238 pounds per square inch gauge. Id. at 6; see Draft Permit pt. III.A, at A-1; Statement of Basis at 2; Region 5, U.S. EPA, Calculation of Well-Specific Pressure Effects 1 (Sept. 16, 2016) (A.R. 13). The Region concluded that such a limitation in the Permit on injection pressure will ensure that pressure during injection does not initiate fractures in the injection zone and will prevent the confining rock formation from fracturing. RTC at 6; see Statement of Basis at 2; see also 40 C.F.R. §§ 144.52(a)(3), 146.23(a)(1) (requiring maximum pressure limit to be set at level assuring new factures will not be created and existing factures will not be propagated in the confining zone). Finally, under the Permit, Muskegon cannot commence injection in the well until it demonstrates mechanical integrity, submits a report for EPA review, and receives a written authorization to inject from EPA. RTC at 11; see Draft Permit pts. I.E.10, I.E.17, at 7, 9. In light of the foregoing, Mr. Addison's petition fails to demonstrate any clear error by the Region in its analysis of injection pressure and fluid volumes.

Finally, Mr. Addison notes that the Region concluded that studies of wells in Oklahoma cannot be reasonably extrapolated to the Holcomb 1-22 well in Michigan, and then he asks what the relevant studies are. Petition at 10. Mr. Addison's criticism fails to acknowledge the comment to which the Region was responding. Specifically, comment 16 stated that the USGS "made a finding that injection wells do, in fact, cause earthquakes," and then made a reference to Oklahoma, implying that there have been documented earthquakes in Oklahoma caused by injection wells. RTC at 11. In response, the Region acknowledged that "[s]tudies have documented that certain injection wells in Oklahoma can cause earthquakes." Id. And the Region then explained that there are a number of prerequisite factors that must exist, such as excessively high injection pressures and fluid volumes as well as the existence of fault zones. Id. The Region noted that the injection pressure and fluid volume proposed for the Holcomb 1-22 well, along with the general lack of faults in the area, "are an unlikely scenario for injectioninduced earthquakes." *Id.* The Region also explained that the geology of Michigan is very different from Oklahoma and that "studies from Oklahoma cannot reasonably be extrapolated" to the proposed Holcomb 1-22 well site in Michigan. *Id.* In light of this response and the other analysis, discussed above, that the Region conducted, Mr. Addison fails to demonstrate that the Region clearly erred in its response to comment 16.

E. Mr. Addison Fails to Demonstrate Clear Error by the Region or That Review Is Otherwise Warranted Regarding Issues the Region Determined to Be Outside the Scope of the UIC Permitting Program Under the SDWA

Mr. Addison maintains that the Region erred in classifying two comments as "out of scope" of the UIC permitting program. Petition at 11-12. Mr. Addison argues that the Region erroneously classified as "out of scope" the following comments: "Fresh water should not be withdrawn at an unlimited rate because it may lower water levels in private wells" and "Fresh water should not be withdrawn at an unlimited rate because it may deplete the aquifer." *Id.*; *see* RTC at 1-2. According to Mr. Addison, the Region should have responded to those comments because "[t]he act of draining water from an aquifer changes the qualities of the water present in it by changing the ratio of water to the toxins that are already present in the ground" and because the Permit, "by granting unlimited withdrawal, could result in depleted aquifer levels." Petition at 12. Mr. Addison's contentions are essentially the same as his challenge to the Region's response to one aspect of comment 13, discussed in Part V.D above – i.e., that the Region should consider the impacts to the aquifer from which Muskegon may withdraw the fresh water it will use to inject into the Holcomb 1-22 well.

In its response to comments document, the Region stated that "EPA received many comments directed at matters outside the scope of the UIC Program's purview," and the Region clarified that comments were out of scope if "they do not relate to the UIC process, or to geologic siting, well engineering, operation and monitoring standards, or plugging and abandonment of the proposed secondary recovery well." RTC at 1. And, as discussed above in Part V.D, the Region explained why the concerns Mr. Addison identifies in this part of his petition are out of scope: "The SDWA does not restrict the withdrawal of fresh water from an aquifer. The State of Michigan regulates ground water and the volume or rate of ground water withdrawal." *Id.* at 9.

Mr. Addison fails to demonstrate that the Region clearly erred in its conclusion that the two comments related to Muskegon's withdrawal of fresh water are "out of scope" or that review is otherwise warranted.

The Board denies the petition for review on this issue.

VI. CONCLUSION

For the foregoing reasons, the Board remands in part and otherwise denies Mr. Addison's petition for review. 11

So ordered.

¹¹ Anyone dissatisfied with the Region's decision on remand must file a petition seeking Board review in order to exhaust administrative remedies under 40 C.F.R. § 124.19(*l*). Any such appeal shall be limited to issues the Region addresses on remand.