# IN RE STONEHAVEN ENERGY MANAGEMENT, LLC

UIC Appeal No. 12-02

***ORDER DENYING REVIEW IN PART AND REMANDING IN PART***

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Decided March 28, 2013

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Syllabus

John E. McNerney ("Petitioner") seeks review of the U.S. Environmental Protection Agency ("EPA" or "Agency") Region 3's ("Region") issuance of an Underground Injection Control ("UIC") permit to Stonehaven Energy Management Co., LLC ("Stonehaven") pursuant to Part C of the Safe Drinking Water Act ("SDWA"), 42 U.S.C. § 300h – 300h-8, and EPA's implementing regulations at 40 C.F.R. parts 124 and 144 through 148. The permit authorizes construction and operation of a Class II injection well, referred to as Latshaw #9, in Cranberry Township, Venango County, Pennsylvania.

On appeal, the Petitioner raises numerous issues. The Environmental Appeals Board ("Board") has identified three primary issues it believes are fairly raised by the petition. The Petitioner argues that: (1) the Region clearly erred in the manner in which it accounted for and considered all wells within the area of review or in the corrective action the Region required as to all existing and abandoned wells; (2) the Region clearly erred in its consideration of the geologic formations in the injection zone and the risk of earthquake; and (3) the Region clearly erred in limiting Stonehaven's financial responsibility requirements in the permit to a $10,000 performance bond to ensure proper abandonment and plugging of the permitted injection well.

Held: The Board remands the permit based on its conclusion that the Region has not provided adequate support in the administrative record for its response to public comments on the geological features of the injection zone and the risk of earthquake. In reviewing an underground injection well permit application, the Region has a regulatory obligation to consider whether geological conditions may allow the movement of any contaminant to underground sources of drinking water. Petitioner and other commenters on the draft permit raised concerns regarding the risk of contamination of underground sources of drinking water due to earthquakes or faults. Although the Region addressed these comments in its response to comments document, the Board concludes that the Region's response was conclusory and that the administrative record does not adequately explain and support the Region's rationale. In particular, the Region did not identify in the record the basis for its conclusions that there is no evidence of seismic activity in the well area and that the evidence shows there are no transmissive faults that intersect or could be influenced by the intended zone of injection. The permit is therefore remanded.

The Board denies review on the claims relating to (1) the Region's examination of existing and abandoned wells and the corrective action required as to those wells and

(2) the limitation on Stonehaven's financial responsibility requirements in the permit to a $10,000 performance bond to ensure proper abandonment and plugging of the permitted injection well. Petitioner made several claims regarding abandoned and existing wells and corrective action. Most of these claims were irrelevant to whether the proposed injection could contaminate underground sources of drinking water. The rest were based on nothing more than speculation. Petitioner did not support its challenge to the Region's determination not to require any financial responsibility requirements other than financial responsibility for closure of the injection well.

***Before Environmental Appeals Judges Leslye M. Fraser, Catherine R. McCabe, and Kathie A. Stein.***

***Opinion of the Board by Judge Fraser:***

## I. *STATEMENT OF THE CASE*

John E. McNerney ("Petitioner") seeks review of the U.S. Environmental Protection Agency ("EPA" or "Agency") Region 3's issuance of an Underground Injection Control ("UIC") permit to Stonehaven Energy Management Co., LLC ("Stonehaven") pursuant to Part C of the Safe Drinking Water Act ("SDWA"), 42 U.S.C. §§ 300h – 300h-8, and EPA's implementing regulations at 40 C.F.R. parts 124 and 144 through 148. The permit authorizes construction and operation of a Class II injection well, referred to as Latshaw #9, in Cranberry Township, Venango County, Pennsylvania. For the reasons set forth below, the Petition is denied in part and granted in part, and the permit is remanded for further action consistent with this decision.

## II. *ISSUES ON APPEAL*

The Petition in this case presents the following issues:

> 1. Has Petitioner demonstrated that the Region clearly erred in the manner in which it accounted for and considered all wells within the area of review or in the corrective action the Region required as to all existing and abandoned wells?
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> 2. Has Petitioner demonstrated that the Region clearly erred in considering the geologic formations in the injection zone and the risk of earthquake?
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> 3. Has Petitioner demonstrated that the Region clearly erred in limiting Stonehaven's financial responsibility requirements in the permit to a $10,000 performance bond

to ensure proper abandonment and plugging of the permitted injection well?

## III. *PROCEDURAL AND FACTUAL HISTORY*

### A. *The UIC Program*

The UIC program was established pursuant to SDWA section 1421, 42 U.S.C. § 300h, and regulations promulgated by EPA at 40 C.F.R. parts 144 through 148 to protect underground sources of drinking water.[1] The program is designed to protect underground water that "supplies or can reasonably be expected to supply any public water system." SDWA § 1421(d)(2), 42 U.S.C. § 300h(d)(2). Permitting constitutes the heart of the program. The regulations specifically prohibit "[a]ny underground injection [] except into a well authorized by rule or except as authorized by permit issued under the UIC program." 40 C.F.R. § 144.11. The UIC regulations establish minimum requirements for state-administered permit programs. EPA administers the UIC program in those

[1] SDWA § 1421(d)(2), 42 U.S.C. § 300h(d)(2); *see In re NE Hub Partners, LP*, 7 E.A.D. 561, 566 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999); *In re Envotech, LP*, 6 E.A.D. 260, 263-64 (EAB 1996); *In re Brine Disposal Well*, 4 E.A.D. 736, 742 (EAB 1993) ("[T]he Agency's UIC regulations are oriented exclusively toward the statutory objective of protecting drinking water sources."). The UIC regulations define the term "underground source of drinking water" as:

> [A]n aquifer or its portion:
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> (a)(1) Which supplies any public water system; or
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> (2) Which contains a sufficient quantity of ground water to supply a public water system; and
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> (i) Currently supplies drinking water for human consumption; or
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> (ii) Contains fewer than 10,000 mg/l total dissolved solids; and
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> (b) Which is not an exempted aquifer.

40 C.F.R. § 144.3.

states that, like Pennsylvania, are not yet authorized to administer their own programs. *See* 40 C.F.R. §§ 144.1(e), 147.1951.

B. *The Stonehaven Permit Proceeding*

On June 30, 2011, Stonehaven applied for a Class II permit[2] for an existing well on property leased from M. Latshaw in Cranberry Township, Venango County, Pennsylvania. Venango County is in the western part of the state, due east of Youngstown, Ohio. Stonehaven plans to convert this existing well, referred to as Latshaw #9, into an injection well for the disposal of brine produced from Stonehaven's oil production operations on the Latshaw property and other leased properties in the area. Region 3's Resp. to the Petition for Review ("Region 3's Resp."), Ex. 1 at 1 (Dec. 21, 2012) (Stonehaven Energy Management, LLC Class II Produced Water Disposal Application (June 30, 2011)). Stonehaven's application specifies that the Latshaw #9 well has a depth of 1,977 to 1,992 feet and penetrates into the Speechley sandstone formation. *Id.* at 5. The Speechley formation, according to the application, is encased in layers of gray shale from both above and below. *Id.* The application states that the only underground drinking water aquifer in the area is a formation known as the Mountain Sand, which is located at a depth of 360 feet. *Id.* at 5; Region 3's Resp., Ex. 4 at 2 (Letter from Thomas F. Havranek, Havoo Oil & Gas, Inc., to S. Stephen Platt, U.S. EPA, Region 3 (Oct. 10, 2011)). In addition, the application includes information on the construction steps needed to convert Latshaw #9 into an injection well, corrective action needed to establish monitoring wells and to plug abandoned wells, and plugging and abandonment plans for Latshaw #9. Region 3's Resp., Ex. 5 (Stonehaven Energy Management, LLC Class II Produced Water Disposal Application (rev. Oct. 2011)).

Following review of the application, the Region prepared a draft permit and a Statement of Basis for its initial determination that the application was "acceptable." Region 3's Resp., Ex. 9. On May 1, 2011, the Region provided public no-

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[2] Under 40 C.F.R. § 144.6, injection wells fall into five classes depending on the material being disposed of in the well. Class II wells are used to inject fluids:

> (1) Which are brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection.
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> (2) For enhanced recovery of oil or natural gas; and
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> (3) For storage of hydrocarbons which are liquid at standard temperature and pressure.

40 C.F.R. § 144.6(b).

tice of the draft permit and its intent to hold a public hearing on June 12, 2011. Region 3's Resp., Ex. 10.

A dozen individuals spoke at the public hearing, including Petitioner. Region 3's Resp., Ex. 15 at 1 (Responsiveness Summary to Public Comment for the Issuance of an Underground Injection Control (UIC) Permit for Stonehaven Energy Management, LLC) [hereinafter Responsiveness Summary]. Commenters raised several issues at the hearing, three of which relate to this petition. First, several commenters questioned whether all of the old and abandoned wells in the area had been identified. Region 3's Resp., Ex. 12 at 11-13, 19, 32 (Transcript of Public Hearing on a Proposed Permit under the Federal Underground Injection Control Program) [hereinafter Public Hearing Tr.]. As one speaker explained, given the long history of oil and gas drilling in the area surrounding the well, "it's like a pin cushion out there." *Id.* at 11. These commenters feared that one of these wells might serve as a conduit allowing brine injected into the Speechley formation to reach the Mountain Sand formation. Second, two commenters raised questions about the geologic structure of the area and how that might affect the integrity of the Speechley formation. *Id.* at 14, 22-23. Petitioner specifically raised the possibility of earthquake damage, asserting that the proposed injection well was close to a fault zone. Finally, two commenters asked whether the permit provided for any financial compensation for homeowners if the injection well did lead to contamination of their drinking water wells. *Id.* at 13, 21.

Following consideration of the public comments it had received, the Region determined that no modification to the permit was needed. Accordingly, on September 24, 2012, the Region issued a final permit and a Responsiveness Summary to the Public Comment Document ("Responsiveness Summary"). Region 3's Resp. at 9. In the Responsiveness Summary, the Region explained the efforts Stonehaven and the Region had taken to identify abandoned wells. The Region also stressed that pressure monitoring in three wells adjacent to Latshaw #9 and the approximately 1,300 feet distance between the Speechley formation and the Mountain Sand formation protected against migration of contamination to the Mountain Sand. Responsiveness Summary at 4. As to the comments about the impact of potential earthquakes, the Region concluded that there was no evidence that the injection well was located in a seismically active area. *Id.* at 3. Further, according to the Region, "[e]vidence indicates that there are no deep-seated transmissive faults that intersect the proposed injection zone or that could be influenced by the proposed injection operation in the future." *Id.* The Region also emphasized that the Speechley formation was under-pressurized due to years of oil and gas extraction, and thus brine injection posed little risk of creating an over-pressurized situation leading to fracturing of the earth. *Id.* Finally, the Region addressed questions about the financial liability of Stonehaven by noting that under the UIC regulations, Stonehaven was required to, and had, provided a $10,000 letter of credit and standby trust agreement to ensure that funds were available for plugging and abandonment of the well. In addition to any financial

requirements imposed on Stonehaven under the UIC regulations, the Region pointed out that EPA has emergency authority under section 1431 of the SDWA to address endangerment situations.[3] *Id.* at 5.

Petitioner filed an appeal, addressed to the EPA Administrator, which the Office of the Administrator received on October 24, 2012.[4] Although the Office of the Administrator forwarded the appeal to the Board, the Board did not receive it until after the filing deadline. The petition raises both issues related to the Stonehaven permit and concerns regarding the existing water quality on Petitioner's property, which is located about six miles from the injection well. Petition at 1. On December 21, 2012, the Region filed its Response to the Petition for Review. The case now stands ready for the Board's decision.

## IV. *STANDARD OF REVIEW*

In determining whether to grant review of a petition filed under 40 C.F.R. § 124.19(a), the Board first considers whether the petitioner has met threshold pleading requirements, such as timeliness, standing, and issue preservation. *See* 40 C.F.R. § 124.19; *In re Beeland Group, LLC*, 14 E.A.D. 189, 194-95 (EAB 2008); *In re Indeck-Elwood, LLC*, 13 E.A.D. 126, 143 (EAB 2006); *In re Avon Custom Mixing Servs., Inc.*, 10 E.A.D. 700, 704-08 (EAB 2002); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000). For example, a petitioner must demonstrate that any issues it appeals either were raised with reasonable specificity during the public comment period, or were not reasonably ascertainable during that period. 40 C.F.R. §§ 124.13, 124.19(a); *see*, *e.g.*, *Indeck*, 13 E.A.D. at 143; *In re Mille Lacs Wastewater Treatment Facility*, 11 E.A.D. 356, 363 & n.7 (EAB 2004); *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 249-50 & n.8 (EAB 1999).

Assuming that a petitioner satisfies its threshold pleading obligations, the Board then considers the petition to determine if review is warranted. *Beeland*, 14 E.A.D. at 194-95; *Indeck*, 13 E.A.D. at 143. Ordinarily, the Board will not

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[3] Section 1431 of the SDWA, 42 U.S.C. § 300i, provides EPA with the authority to take such action as is necessary to protect the health of persons from "a contaminant which is present in or is likely to enter a public water system or an underground source of drinking water" if the contaminant "may present an imminent and substantial endangerment."

[4] The petition was submitted directly to the Administrator pursuant to instructions the Region erroneously provided in its Responsiveness Summary. The Region should have directed that any petitions filed must be submitted directly to the Board, as required by 40 C.F.R. § 124.19. Since 1992, the regulations have required that UIC permit appeals be filed directly with the Board. 40 C.F.R. § 124.19(a). The Region should ensure that in the future, it directs commenters on draft permits to file appeals on final permits with the Board at its current address, which is provided on the Board's website. Please note that as of March 26, 2013, other changes in Part 124 are in effect for permit appeals.

review a petition filed under 40 C.F.R. § 124.19(a) unless it appears from the petition that the permit decision or the permit condition in question is based on a clearly erroneous finding of fact or conclusion of law, or involves an exercise of discretion or an important policy consideration that the Board, in its discretion, should review. 40 C.F.R. § 124.19(a); *accord In re Chukchansi Gold Resort & Wastewater Treatment Plant*, 14 E.A.D. 260, 264 (EAB 2009); *In re Scituate Wastewater Treatment Plant*, 12 E.A.D. 708, 717 (EAB 2006); *In re Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 332-33 (EAB 2002); *In re New Eng. Plating Co.*, 9 E.A.D. 726, 729 (EAB 2001). In considering permit appeals, the Board is guided by the preamble to the part 124 regulations, which explains that review should be "only sparingly" exercised and that "most permit conditions should be finally determined at the Regional level." Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980); *accord Scituate*, 12 E.A.D. at 717; *In re City of Moscow*, 10 E.A.D. 135, 140-41 (EAB 2001).

For each issue raised in a petition, the burden of demonstrating that review is warranted rests with the petitioner, who must raise objections to the permit and *explain why* the permit issuer's previous response to those objections is clearly erroneous or otherwise warrants review.[5] *In re Teck Cominco Alaska, Inc.*, 11 E.A.D. 457, 494-95 (EAB 2004); *In re Town of Westborough*, 10 E.A.D. 297, 305, 311-12 (EAB 2002); *In re City of Irving*, 10 E.A.D. 111, 129-30 (EAB 2001), *review denied sub nom. City of Abilene v. EPA*, 325 F.3d 657 (5th Cir. 2003). Consequently, the Board consistently has denied review of petitions that merely cite, attach, incorporate, or reiterate comments previously submitted on the draft permit. *E.g., In re City of Pittsfield*, NPDES Appeal No. 08-19 (EAB Mar. 4, 2009) (Order Denying Review), *aff'd*, 614 F.3d 7 (1st Cir. 2010); *City of Irving*, 10 E.A.D. at 129-30; *In re Hadson Power 14*, 4 E.A.D. 258, 294-95 (EAB 1992) (denying review where petitioners merely reiterated comments on draft permit and attached a copy of their comments without addressing permit issuer's responses to comments); *see also In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005) ("[P]etitioner may not simply reiterate comments made during the public comment period, but must substantively confront the permit issuer's subsequent explanations.").

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[5] Federal circuit courts of appeal have upheld this Board requirement that a petitioner must substantively confront the permit issuer's response to the petitioner's previous objections. *City of Pittsfield v. U.S. EPA*, 614 F.3d 7, 11-13 (1st Cir. 2010), *aff'g In re City of Pittsfield*, NPDES Appeal No. 08-19 (EAB Mar. 4, 2009) (Order Denying Review); *Mich. Dep't Envtl. Quality v. U.S. EPA*, 318 F.3d 705, 708 (6th Cir. 2003) ("[Petitioner] simply repackag[ing] its comments and the EPA's response as unmediated appendices to its Petition to the Board * * * does not satisfy the burden of showing entitlement to review."), *aff'g In re Wastewater Treatment Facility of Union Twp.*, NPDES Appeal Nos. 00-26 & 00-28 (EAB Jan. 23, 2001) (Order Denying Petitions for Review); *LeBlanc v. EPA*, 310 Fed. Appx. 770, 775 (6th Cir. 2009) (concluding that the Board correctly found petitioners to have procedurally defaulted where petitioners merely restated "grievances" without offering reasons why the Region's responses were clearly erroneous or otherwise warranted review), *aff'g In re Core Energy, LLC*, UIC Appeal No. 07-02 (EAB Dec. 19, 2007) (Order Denying Review).

## V. *ANALYSIS*

Although the Board did not receive the Petitioner's appeal within the filing deadline, the Board will relax that deadline under the circumstances of this case. A petitioner must file a UIC permit appeal within thirty days of the permit decision. 40 C.F.R. § 124.19(a); *see id.* § 124.20 (computation of time). If the Board does not receive a petition for review by the filing deadline, it generally will dismiss the petition on timeliness grounds unless special circumstances exist. *In re MHA Nation Clean Fuels Recovery*, 15 E.A.D. 648, 658 (EAB 2012); *In re AES P.R., LP*, 8 E.A.D. 324, 328 (EAB 1999), *aff'd sub nom. Sur Contra La Contaminación v. EPA*, 202 F.3d 443 (1st Cir. 2000). The Board has found special circumstances to exist in cases where mistakes by the permitting authority have caused the delay or when the permitting authority has provided misleading information. *See, e.g., In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 123-24 (EAB 1997) (delay attributable to permitting authority as it mistakenly instructed petitioners to file appeals with EPA Headquarters Hearing Clerk); *In re Hillman Power Co., LLC*, 10 E.A.D. 673, 680 n.4 (EAB 2002) (permit issuer failed to serve all parties that had filed written comments on the draft permit). The Board concludes that special circumstances are present in this case because the Region erroneously directed potential petitioners to file any petitions for review with the EPA Administrator and the Administrator received the Petition within the filing deadline. Responsiveness Summary at 7. The Board emphasizes that a petitioner only may appeal a permit to the Board, and an appeal filed with the Administrator is not an appeal to the Board.

The Petition also suffers from a lack of clarity regarding the specific issues Petitioner is challenging in the Stonehaven permit decision. *See* Region 3's Resp. at 10. However, because Petitioner appears to be unrepresented by counsel, the Board has construed his "arguments broadly so as to understand and resolve the questions fairly raised by them." *In re Envtl. Disposal Sys., Inc.*, 12 E.A.D. 254, 293 n.27 (EAB 2005); *accord In re Shell Offshore*, 15 E.A.D. 536, 543 (EAB 2012) ("[T]he Board endeavors to construe liberally objections raised by parties unrepresented by counsel (i.e., those proceeding pro se), so as to fairly identify the substance of the arguments being raised."). In that spirit, the Board has identified three issues it believes are fairly raised by the petition: (1) the Region clearly erred in the manner in which it accounted for and considered all wells within the area of review or in the corrective action it required as to all existing and abandoned wells; (2) the Region clearly erred in its consideration of the geologic formations in the injection zone and the risk of earthquake; and (3) the Region clearly erred in limiting Stonehaven's financial responsibility requirements in the permit to a $10,000 performance bond to ensure proper abandonment and plug-

ging of the permitted injection well.[6] Petitioner or others raised each of these issues with sufficient specificity during the public comment period, and accordingly, the Board finds the threshold pleading requirements are met. The Board next examines whether the permit, or a condition in the permit, rests on a clearly erroneous finding of fact or conclusion of law or involves an exercise of discretion or an important policy consideration that the Board, in its discretion, should review.

A. *Petitioner Has Failed to Show That the Region Inadequately Accounted for Abandoned Wells or That the Permit's Corrective Action Plan Is Flawed.*

Petitioner raises several concerns about abandoned wells on his property, as well as on or near the property containing the proposed injection well, Latshaw #9. An important part of the application and approval process for Class II wells is identifying existing and abandoned injection and drinking water wells in the area of the proposed well and developing appropriate corrective action plans, as needed, for these wells. "[I]mproperly plugged or completed wells * * * [can] serve as a conduit for the migration of fluids" into underground sources of drinking water. Water Programs; State Underground Injection Control Programs, 44 Fed. Reg. 23,738, 23,744 (Apr. 20, 1979). The UIC regulations require an applicant to provide to the Agency:

> A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source depicting * * * those wells, springs and other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within a quarter mile of the facility property boundary.

40 C.F.R. § 144.31(e)(7). Not only must the Region consider this specific map information in authorizing Class II wells, but the regulations also specify certain data that the Region must consider on the operation, construction, and history of any water wells within the "area of review." 40 C.F.R. § 146.24(a)(1)-(3); *see id.*

[6] Petitioner also raises a number of issues that are beyond the scope of the appeal of a UIC permit. "The UIC permitting process is narrow in its focus and the Board's review of the UIC permit decisions extends only to the boundaries of the UIC permitting program, which is limited to the protection of underground sources of drinking water." *In re Bear Lake Props., LLC*, 15 E.A.D. 630, 643 (EAB 2012) (citing cases). Petitioner has included claims concerning lead contamination in drinking water on his property, lack of local police enforcement, contaminated water in abandoned coal mines, and drilling of wells into the Marcellus shale. However, he has not explained how these claims relate to the Stonehaven permit or the UIC regulations. Because these claims are outside the Board's scope of review, the Petition is denied as to all of them.

§ 144.55(a) (requiring applicants to identify, among other things, all wells within the area of review that penetrate the injection zone). Under 40 C.F.R. § 144.3, the "area of review" is defined as the area surrounding the injection well calculated according to the criteria set forth in 40 C.F.R. § 146.6. Section 146.6 calls for the area of review to be determined according to calculation of a "zone of endangering influence" or according to a "fixed-radius method." Failure by the Region "to provide a reasoned analysis in the record evidencing compliance with its regulatory obligation to ensure that water wells within the applicable area of review are properly identified and considered prior to permit issuance" constitutes clear error. *In re Bear Lake Props., LLC*, 15 E.A.D. 630, 639 (EAB 2012).

In addition, for all wells in the area of review that penetrate the injection zone, the applicant must submit a corrective action plan "consisting of such steps or modifications as are necessary to prevent movement of fluid into underground sources of drinking water." 40 C.F.R. § 144.55(a); *see id.* § 144.52(a)(2). The regulations also prescribe criteria and factors for the Region to consider in determining the adequacy of proposed corrective action, *id.* § 146.7, and require the Region to consider the corrective action plan in evaluating a Class II well permit application. *Id.* § 146.24(a)(8).[7]

Petitioner appears to make three separate claims that relate to abandoned wells. First, Petitioner alleges that there are hundreds of abandoned wells on or near his property that have not been properly plugged and these wells serve as a conduit to underground drinking water sources. He describes in some detail some of the difficulties he has had with six of these wells. Petition at 5-6. Second, Petitioner describes an attempt to drill a drinking water well close to Latshaw #9 that proved unsuccessful because the drill crew hit contaminated water before they reached the Mountain Sand formation. *Id.* at 4. The well then was capped and abandoned. Petitioner suggests that the contaminated water might have come from abandoned coal mines. Finally, he states that the same individual who allegedly incorrectly plugged wells on his property also may have taken ownership of wells on or near Latshaw #9 and engaged in similar practices there. *Id.* at 5.

Because Petitioner's contentions fail to contest the specific determinations made by the Region and rely only on either irrelevant information or speculation, they fall far short of demonstrating the Region's determinations were clearly erroneous. Petitioner's claim regarding the abandoned wells on or near his property concern wells outside the area of review for the permit (a one quarter mile radius

[7] Section 146.24(a)(8) references "corrective action proposed to be taken by the applicant under 40 C.F.R. § 122.44." This cross-reference appears to be in error in that section 122.44 specifies conditions that must be included in National Pollutant Discharge Elimination System permits. The proper cross-reference should be to 40 C.F.R. § 144.55. *See* 48 Fed. Reg. 14,146, 14,151 (Apr. 1, 1983) (deconsolidating permit program regulations and moving UIC requirements to new Part 144).

around the proposed injection well) and/or outside the scope of the required topographic map (one mile beyond the property boundary). By his own admission, Petitioner's property is approximately six miles from the area of review and five miles outside of the scope of the required topographic map. Absent a showing that the Region inappropriately undersized the area of review, the existence of improperly plugged wells on Petitioner's property is irrelevant to the Region's consideration of the Latshaw #9 permit. Petitioner, however, has not disputed the size of the area of review, much less presented evidence showing it to be incorrectly determined under the applicable regulations.

Petitioner's claim regarding the presence of contamination in a shallow well (above the Mountain Sand formation) near Latshaw #9 also is irrelevant to the Region's decision on the permit. The permit is concerned with preventing migration from the deep injection site (the Speechley formation) to shallower underground drinking water sources. To this end, the permit requires the injection well and monitoring wells to be re-constructed to isolate the Speechley formation. Responsiveness Summary at 2. Petitioner has neither presented record evidence challenging the adequacy of the steps taken to achieve that isolation, nor explained how contamination at depths well above the Speechley formation might cause migration from the Speechley formation.[8]

Finally, Petitioner's assertion that the same individual who allegedly improperly plugged wells on his property may have taken ownership of wells near Latshaw #9 and improperly plugged them as well is speculative. Petitioner has pointed to no record evidence indicating this individual owns wells on the Latshaw property and no specific evidence on how wells on the property were plugged. The Board previously has held that it "will not overturn a permit provision based on speculative arguments." *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 58 (EAB 2001); *accord In re Russell City Energy Ctr., LLC*, 15 E.A.D. 1, 80 n.96 (EAB 2010) (denying review because petitioner's assertions were "speculative in nature").

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[8] Even if Petitioner's arguments could be read as a challenge to the Region's technical determinations on the area of review and the corrective action permit requirements, they must be rejected. The Board will defer to the Region's expertise on technical determination, such as the appropriate size of the area of review, if the Region "adequately explains its rationale and supports its reasons in the record." *Bear Lake Props.*, 15 E.A.D. at 646. Here, the Region has documented in the record its reasons and the factual basis for accepting the applicant's proposed area of review and the corrective action steps taken as to the injection and monitoring wells to isolate the Speechley formation. Region 3's Resp., Ex. 8; Responsiveness Summary at 2-4. In these circumstances, the Board's conclusion in *Environmental Disposal Systems* is equally applicable here: "[f]airly read, [the petitioner's] appeal fails to present any sufficiently specific or compelling evidence or argument that would cast doubt on the thoroughness or rationality of the Region's technical evaluations and conclusions." *In re Envtl. Disposal Sys., Inc.*, 12 E.A.D. 254, 292 (EAB 2005).

On the other hand, the Region has cited to specific record evidence on both Stonehaven's well identification efforts and adequacy of the permit's corrective action requirements. Stonehaven proposed an area of review of a one-quarter-mile radius around Latshaw #9, and the Region accepted that proposal based on its calculation of the zone of endangering influence. Responsiveness Summary at 4. The permit application documents the many wells in the area of review, and the Responsiveness Summary indicates that both the applicant and EPA attempted to field-verify additional abandoned wells. Region 3's Resp., Ex. 5 at 4-5; Responsiveness Summary at 4. Finally, the Region requested at the public hearing that members of the public submit any information they had on abandoned wells. Region 3's Resp., Ex. 5 at 4. No members of the public identified additional wells. *Id.* As to corrective action, the Region notes that the permit requires that Stonehaven take corrective action to ensure that the existing production wells that will be used as monitoring wells are completely isolated from the Speechley formation and to plug all abandoned wells that have been found or are discovered in the future. *Id.* at 2-4.

For the above reasons, the petition for review on these issues is denied.

B. *The Region Failed to Articulate the Basis in the Record for Its Findings on the Geological Features of the Injection Zone and Earthquake Risk*

Petitioner also contests the Region's conclusions about the potential risk of earthquakes affecting the Latshaw #9 well. Just as the Region must consider whether wells in the area of review for the proposed Class II well may lead to contamination of underground sources of drinking water, so too must the Region consider whether the area's geological conditions constitute a similar endangerment. In evaluating permit applications, the Region must consider "appropriate geological data on the injection zone" and a map prepared by the applicant that may show "faults known or suspended [sic]."[9] 40 C.F.R. § 146.24(a)(2), (6). Additionally, "[i]n determining the adequacy of corrective action plans * * * [to] prevent[] fluid movement into underground sources of drinking water," the Region is required to consider the area's "[g]eology." *Id.* § 146.7(d). Finally, the regulations command that "[a]ll new Class II wells shall be sited in such a fashion that they inject into a formation which is separated from any [underground drinking water source] by a confining zone that is free of known open faults or fractures." *Id.* § 146.22(a).

Petitioner argues that the Region has not adequately considered whether an earthquake could lead to a catastrophe. Petitioner specifically contests the Region's conclusion that there is "no evidence of seismic activity" in the region and

[9] The Board believes the intended term is "suspected."

attached several press clippings to his Petition in support. Petition at B. These news articles report on several earthquakes experienced in and around the western Pennsylvania area. Further, Petitioner claims that the Speechley formation has a "vertical rock formation" and "ground faults." *Id.* These arguments build upon claims made at the public hearing. There, Petitioner questioned the wisdom of the proposed well, asserting that it might affect a fault that runs into Ohio and that injection wells in Ohio previously had caused seismic activity around that fault:

> This Speechley well going down, it's in the southern tier of the field, the southern is the most productive part of that field. They contribute that [sic] to a fault that runs through here. That fault runs east and west over into Ohio and I believe they got trouble over there doing the same thing you're going to do here that caused an earthquake. Is this injection well here going to feed into that fault? This fault runs right through here (indicating).

Public Hearing Tr. at 14. In response to Petitioner's question, the Region stated that "we can't answer questions now, but similar questions like that we can answer at the end of the hearing * * * ." *Id.* Another speaker made detailed comments on the geology of the area and specifically demanded that the Region make available to the public any information regarding the potential for fracturing in underground formations:

> Now, I heard water goes into this formation very quickly with very little pressure. I would raise a big question geologically: Is it going in through natural porosity or are there very small microfractures we don't see? And a fracture can be five feet, ten feet away from a well bore that can't be detected by any other means and still be there and still feed. So, once again, that reservoir needs to be looked at a lot more carefully.
>
> * * * So I would suggest to you that there is a lot of natural fracturing, even though it may be small, underground. So when I hear the claims that there is no fracturing, that there are no fractures here, I would have to ask that the information somehow be made public so that we can see to what degree that may be true or not * * * .

*Id.* at 22-23 (statement of John Lendrum).

Although the Region acknowledges that underground injection has been associated with earthquakes, it argues that the geologic evidence concerning the Latshaw #9 well does not show faults or indicate a risk of injection-induced earth-

quakes. Region 3's Resp. at 14. According to the Region, "there is no evidence that there are transmissive faults that intersect or could be influenced by the intended zone of injection for the Stonehaven permit" and there is no "history of nearby injection-related seismic activity." *Id.* at 14-15. The Region buttresses these claims by citing to its regulatory track record: "None of the dozens of injection wells permitted by EPA in Pennsylvania since 1985 has caused injection-related seismic activity." *Id.* Turning to the Petitioner's evidentiary submissions on earthquakes, the Region disputes the relevance of the press clippings, arguing that they only identify one earthquake in the vicinity of Venango County and that earthquake was not related to underground injection. *Id.* at 14. Further, the Region challenges whether the Board can consider the clippings because they were not submitted during the comment period. *Id.* at 14 n.3. As an additional reason for rejecting Petitioner's claim on earthquakes, the Region contends that the Speechley formation is under-pressurized and that the permit limits the maximum injection pressure. Finally, noting that the "review of geological data" is a technical issue, the Region asserts that the Board should defer to the Region especially given that Petitioner "does not provide any technical data that bear on the formation at issue for this injection well." *Id.* at 15.

Deferral to the permitting agency clearly is appropriate on scientific and technical matters, such as questions regarding geological structure and potential earthquake risk. *Bear Lake Props.*, 15 E.A.D. at 646; *Envtl. Disposal Sys.*, 12 E.A.D. at 289-90. But deferral does not require blind acceptance. Where, as here, Petitioner has challenged the Region's technical determinations, the Board must ascertain whether these determinations are adequately explained and supported by information in the administrative record. As the Board frequently has held: "Although we traditionally assign a heavy burden to petitioners seeking review of issues that are essentially technical in nature, we nevertheless, do look to determine whether the record demonstrates that the Region duly considered the issues raised in the comments and whether the approach ultimately adopted by the Region is rational in light of all information in the record." *Gov't of D.C.*, 10 E.A.D. at 342; *see also Envtl. Disposal Sys.*, 12 E.A.D. at 289. Moreover, the Board has emphasized that a permit issuer must "adequately explain[] its rationale and support[] its reasons in the record." *Bear Lake Props.*, 15 E.A.D. at 646. The Board "will not hesitate to order a remand when a Region's decision on a technical issue is illogical or inadequately supported by the record." *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 568 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3rd Cir. 1999). Accordingly, the Board's inquiry on a technical question must focus on whether the record provides a rational basis for the Region's conclusion.

Petitioner's claims regarding the risk of earthquake damage producing contamination of underground drinking water are, at best, lightly documented. Petitioner has not submitted evidentiary support for his claims regarding faults and fractures, and he has submitted only press reports to document both seismic activ-

ity generally and injection-related earthquakes. Still, the Board is obliged to examine the record to determine if the Region has provided a rational basis for rejection of Petitioner's earthquake-related objections to the Region's approval of the permit application. *In re ConocoPhillips Co.*, 13 E.A.D. 768, 799 (EAB 2008) ("[T]he fact that the Board will generally defer to [the Illinois Environmental Protection Agency] on technical issues does not relieve [it] of its obligation to adequately explain and support its rationale in the record."). Here, the Region, in its Responsiveness Summary, presents three interrelated reasons why the injection activities at the Latshaw #9 well are not threatened by the risk of earthquake: (1) the well is not located in a "seismically active area;" (2) "[e]vidence indicates that there are no deep-seated transmissive faults that intersect or could be influenced by the intended zone of injection for the Stonehaven permit;" and (3) the permit contains conditions designed to avoid over-pressurization of the Speechley formation, which could lead to fracturing of the confining layer. Region 3's Resp. at 14. Although these reasons, on their face, appear to present the required rational basis, that appearance of rationality evaporates because the Board can find little or no record support for either of the first two conclusions.[10]

Despite the Region's promise at the public hearing to provide more information about whether the proposed injection well would feed into a fault line, nowhere does the Responsiveness Summary or the record disclose what information or records were searched or what data were relied upon to document the lack of seismic activity in the well location. The Board presumes that when the Region states that it has "no evidence" of seismic activity that it examined the question and could find no record of seismic events. But the Board has identified no docu-

[10] Based on the existing record, the Board does not have sufficient information to make a determination regarding whether the Region's reliance on data on the pressurization of the Speechley formation and the restrictions in the permit concerning pressurization are adequate, on their own, to support the Region's conclusions on earthquake risk. The Responsiveness Summary explains that either over- or under-pressurization can cause earthquakes. The Speechley formation, according to the Region, is currently under-pressurized due to years of extraction of oil and gas from the formation. Responsiveness Summary at 3. The Region states that there is "no evidence" of seismic activity from the under-pressurization; however, as with its other findings on seismic activity, the Region does not indicate the basis for this conclusion. *Id.* Any concern that over-pressurization could cause earthquakes or fracturing is, according to the Region, addressed by the permit limits on maximum injection pressure in the permit. *Id.* It is not clear, however, that the Region has determined that the data on the pressurization of the Speechley formation and the permit limits on injection pressure would alone address any concern for seismic activity. As noted, the Responsiveness Summary relies on a combination of factors (no evidence of seismic activity, evidence showing no transmissive faults, and under-pressurization) to conclude that there is not a risk for contamination of underground sources of drinking water from earthquakes. Nor has the Region's Response Brief asserted that the information on pressurization by itself is sufficient to support the Region's determination on earthquake risk. Region 3's Resp. at 14-15. Given these circumstances, the Board is in no position to make the technical determination whether the under-pressurization of the Speechley formation and permit limits on injection pressure would be sufficient to support dismissal of Petitioner's concerns regarding earthquake risk. Technical determinations, such as this, require the Region's expertise.

mentation of such a search in the administrative record. *See In re Haw. Elec. Light Co., Inc.*, 8 E.A.D. 66, 101 (EAB 1998) ("[I]f [the Hawaii Department of Health] disputes the Petitioners' allegation that a change in [the volcanic] eruption pattern occurred, it should have clearly stated its conclusion on this issue and provided support in the record.").

The news articles submitted by the Petitioner further undermine the Board's confidence in the record support for the conclusion on seismic activity. While the Region is correct that these articles were not timely submitted during the public comment period, the Board has been willing to consider new evidentiary proffers as part of a petition "where a petitioner submits documents in response to new materials added to the record by the Region in response to comments." *In re Dominion Energy Brayton Point, LLC*, 13 E.A.D. 407, 418 (EAB 2007). Here, the Region included its conclusion regarding the lack of seismic activity in the record for the first time in the Responsiveness Summary, and Petitioner submitted the press articles specifically to rebut that statement in the Responsiveness Summary. In these circumstances, it is appropriate for the Board to consider the articles. Nonetheless, because the proffer consists merely of press articles and not official or scientific documents, the Board limits its consideration to what these articles assert was in the realm of public knowledge at that time.[11] The submitted articles report, among other things, that a 1998 earthquake and eleven aftershocks from that quake were centered in Crawford County, Pennsylvania (Crawford County borders Venango County to the northwest); that a December 2011 earthquake centered outside of Youngstown, Ohio, was caused by underground injection of waste, and was felt in western Pennsylvania; and that a March 2012 earthquake centered in Canada was felt in western Pennsylvania. Petition at A-O. Given these public reports concerning seismic activity in and around western Pennsylvania, the absence of any record material explaining the Region's conclusion on seismic activity becomes even more striking.

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[11] Alternatively, the Board could take "official notice" of these articles to show what information is in the public realm. "Courts allow agencies 'wide latitude in taking official notice.'" *Riveria-Cruz v. Immigration and Naturalization Service*, 948 F.2d 962, 966 (5th Cir. 1991) ("An agency such as the Board [of Immigration Appeals] may take official notice of 'commonly acknowledged facts, [and] * * * technical or scientific facts that are within the agency's area of expertise.'"); *Kaczmarczyk v. Immigration and Naturalization Service*, 933 F.2d 588, 596 (7th Cir. 1991), *cert. denied*, 502 U.S. 981 (1981). Federal courts, operating under the more constraining concept of "judicial notice," Fed. R. Evid. 201, have taken judicial notice of press articles to determine what information was in the public realm. *Von Saher v. Norton Simon Museum of Art at Pasadena*, 578 F.3d 1016, 1022 (9th Cir. 2009) ("Courts may take judicial notice of publications introduced to 'indicate what was in the public realm at the time, not whether the contents of those articles were in fact true.'"); *Premier Growth Fund v. Alliance Capital Mgmt.*, 435 F.3d 396, 401 n.15 (3d Cir. 2006). Here, the Region does not dispute that this information was in the public realm; in fact, the Region does not even dispute the accuracy of the press reports.

The Region, in its Response Brief, attempts to diminish the relevance of these press reports to the current proceeding; however, the Board is not persuaded that any of the Region's arguments justify the total absence in the record of evidence bearing on the seismic activity in the area. The Region claims that the reports do not show that any injection-related seismic activity has occurred in western Pennsylvania. Rather, the Region emphasizes that the reports only document injection-induced events "in other geologic formations in other parts of the United States, such as Ohio and Arkansas." Region 3's Resp. at 14. Further, the Region points to a statement in the article on the 1998 earthquake noting that seismic activity is rare in western Pennsylvania. *Id.* The Petitioner, however, raised concerns with both seismic activity generally, and injection-induced earthquakes. The Region, however, fails to explain why only injection-induced earthquakes are of relevance to injection well permitting. Seismic activity generally would seem to be pertinent given the UIC regulations' emphasis on geologic data related to faults and fractures. *See* 40 C.F.R. § 146.22(a). Additionally, the Region fails to take into account that fault lines do not respect political boundaries. Earthquakes halfway across the United States potentially may have little relevance to injection wells in Pennsylvania, but earthquake activity in neighboring Ohio is not so easily ignored. The State of Ohio borders directly on Pennsylvania's western boundary, and the purported injection-induced earthquake in Ohio occurred in the town of McDonald – only about ten miles from the western border of Pennsylvania and approximately fifty-five miles from Stonehaven's proposed injection well. Finally, that the 1998 article characterized earthquake activity in western Pennsylvania as rare does not render irrelevant more recent earthquake reports.

Equally troubling, the record lacks any readily identifiable material to support the statement in the Responsiveness Summary that "[e]vidence indicates that there are no deep-seated transmissive faults that intersect the proposed injection zone or that could be influenced by the proposed injection operation in the future."[12] Responsiveness Summary at 3. The Responsiveness Summary does not explain what "evidence" the Region considered in reaching this conclusion, and the Board's independent review of the record has not provided further enlightenment. Although the Statement of Basis in support of the draft permit asserts that "[t]he permittee has submitted geological information of public record documenting the absence of any faults/fractures that could be influenced during the injection operation," Region 3's Resp., Ex. 9 at 2, these public records are not attached to the permit application in the record.

[12] The discussion in the Responsiveness Summary on earthquakes is remarkably similar to the discussion of this issue in the Responsiveness Summary in *Bear Lake Properties*. In fact, the statement noting that "[e]vidence indicates that there are no deep-seated transmissive faults" tracks the language from the Bear Lake response to comments document word-for-word. *Bear Lake Props.*, 15 E.A.D. at 644.

What the permit application contains is a short geologic description of the injection zone and information on the "fracture pressures" for the three wells in the area of review that penetrate the Speechley formation. Region 3's Resp., Ex. 5 at 5. Attached to this brief statement are printouts of "openhole log" graphs and work reports on fracture pressure testing. The Board looks to the Region to interpret and explain such technical information, but the Region has provided no such interpretation or explanation in the record. While this information appears to be "geological data on the injection zone," without an interpretation or explanation of the data, the Board cannot determine whether it supports the Region's conclusion regarding "transmissive faults," nor whether there is a rational basis for the necessary regulatory finding that the proposed well is "sited in such a fashion that [it] inject[s] into a formation which is separated from any [underground source of drinking water] by a confining zone that is free of known open faults or fractures." 40 C.F.R § 146.22(a); *see Gov't of D.C.*, 10 E.A.D. at 342-43 ("Without an articulation by the permit writer of his analysis, we cannot properly perform any review whatsoever of that analysis and, therefore, cannot conclude that it meets the requirement of rationality.").

In these circumstances, the Board concludes that this case materially differs from the earthquake risk issue presented in *Bear Lake Properties*, 15 E.A.D. 630 (EAB 2012). There, the petitioner also argued that Region 3 erred by not taking into account that the proposed injection well was in an earthquake prone zone. In support, the petitioner relied upon non-record articles purporting to show a connection between underground injection and earthquakes. The Region responded by citing a lack of evidence of earthquake activity or deep-seated transmissive faults and by also noting that the injection zone was under-pressurized. In addition, the Region investigated claims the petitioner made regarding injection-related seismic activity at a well located nearby in Region 2. Under these facts, the Board refused to grant review. *Id.* at 646; *see Envtl. Disposal Sys.*, 12 E.A.D. at 290-92. A critical difference between *Bear Lake Properties* and the present case, however, is that in *Bear Lake Properties*, record evidence indicated the Region had investigated the specific claims of the petitioner. *Bear Lake Props.*, 15 E.A.D. at 646. That is not so here. Significantly, Petitioner and others specifically raised at the public hearing relevant questions under the Class II permit requirements regarding earthquakes, fracturing, and faults. Further, commenters called for the Region to make available to the public all information supporting the Region's conclusions on these issues and the Region promised to respond to the particular matters raised. Yet, the Region's Responsiveness Summary replied, in large part, with general conclusory statements about earthquake activity and faults. The Responsiveness Summary cited no specific evidence on these points, and the record otherwise only contains unexplained reports on fracture testing. The Region's brief now cites to those same conclusory statements as

the primary ground for the Board to deny review.[13]

Accordingly, the Board concludes that the Region's failure to articulate the basis in the record for its findings on the geological features of the injection zone and earthquake risk was clear error.[14] *See Bear Lake Props.*, 15 E.A.D. at 639 (permit remanded because the Region "failed to * * * compile a record sufficient to assure the public that the Region relied on accurate and appropriate data in satisfying its obligations"); *accord In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417 (EAB 1997) (permit decision remanded where "the record does not provide a clear explanation or a 'properly supported finding'"); *In re Carolina Power & Light Co.*, 1 E.A.D. 448, 451 (Act'g Adm'r 1978) (the Regional Administrator "must articulate with reasonable clarity the reasons for his conclusions and the significance of the crucial facts in reaching those conclusions"). The permit is remanded to the Region for reconsideration. In any decision on remand, the Region must clearly articulate its obligations and the data relied upon in complying with those obligations. If the Region decides to reissue the permit, it must include specific findings, based upon evidence in the record, on earthquake risk and on the existence of faults and fractures in the confining zone for the Speechley formation, and make those findings available to the public for review and comment.

C. *Petitioner Has Failed to Show That the Region Clearly Erred in Limiting Stonehaven's Financial Responsibility to a $10,000 Performance Bond to Cover Abandonment and Plugging of the Latshaw #9 Well*

Petitioner argues that the $10,000 performance bond for plugging and abandonment of Latshaw #9 is insufficient to address the potential costs the community faces if the well contaminates underground drinking water supplies. The UIC

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[13] For similar reasons, the Board concludes this case also is distinguishable from *In re Beeland Group, LLC*, 14 E.A.D. 189 (EAB 2008). In *Beeland*, another UIC case, the Region was faced with a challenge to its determination regarding the permeability of the confining layer for the injection zone. *Id.* 14 E.A.D. at 196-97. The Board denied review because the Region provided a detailed explanation for its decision relying "upon geologic data and upon data from other wells located in the underlying Dundee Limestone formation that receive injection fluids with contaminant levels similar to the injection fluids for the proposed well, as well as the Permit's testing and reporting conditions." *Id.* at 199.

[14] The Board expresses no opinion on whether the evidence on fracturing in the permit application, once interpreted and explained, might be sufficient to support the permit application. This is a matter that should be decided by the permitting authority, the technical expert, in the first instance. Rather, the Board is remanding because the primary asserted justifications for rejection of the petition are conclusions that are not explained based upon evidence included in the record. Further, the Board notes that the Region raises for the first time in this proceeding in its brief the assertion that its previous experience with injection wells in Pennsylvania has indicated no concern for injection-caused earthquakes. As the Region has indicated that earthquake risk appears to be a site-specific phenomenon, this information would be more probative if the Region could cite to specific injection wells in Venango County or the vicinity involving similar geological conditions.

regulations specifically impose financial requirements for plugging and abandonment of Class II wells. Applicants are required to submit a plan for plugging and abandonment of the well that complies with 40 C.F.R. § 146.10. 40 C.F.R. § 144.31(e)(10). Further, the applicant must "demonstrate and maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the [Region] * * * ." *Id.* § 144.52(a)(7). In reviewing applications, the Region is required to consider "[a] certificate that the applicant has assured through a performance bond or other appropriate means, the resources necessary to close[,] plug[,] or abandon the well as required by 40 C.F.R. § 122.42 (g)."[15] *Id.* § 146.24(a)(9). More extensive express financial responsibility requirements have been established for other well classes. *See, e.g.*, 40 C.F.R. pt. 144, subpt. F (Financial Responsibility: Class I Hazardous Waste Injection Wells).

Petitioner does not argue that $10,000 is insufficient for abandonment and plugging of the Latshaw #9 well. Rather, he claims that the community may face catastrophic costs if the Mountain Sand formation is contaminated because many people in the area depend on water from that formation for drinking water. In the Responsiveness Summary, the Region explains the financial responsibility requirements pertaining to plugging and abandonment of wells and what Stonehaven had done to comply with these requirements. Responsiveness Summary at 5; *see also* Region 3's Resp. at 16. The Responsiveness Summary also notes that EPA has other authorities to deal with situations involving groundwater contamination. Responsiveness Summary at 5 (citing 42 U.S.C. § 300i). While not explicit, the Region appears to suggest that the Region does not have the authority to impose further financial responsibility requirements on operators of Class II wells under the UIC permit regulations. For his part, Petitioner offers no argument, legal or otherwise, as to why the Region's conclusion here is clearly erroneous. Due to Petitioner's failure to meaningfully contest the Region's conclusion, the petition for review on this issue is denied. *Envtl. Disposal Sys.*, 12 E.A.D. at 292 n.26 (quoting *In re Beckman Prod. Servs.,* 5 E.A.D 10, 19 (EAB 1994) ("While the Board does not expect or demand that [pro se] petitions will necessarily conform to exacting and technical pleading requirements, a petitioner must nevertheless comply with the minimal pleading standards and articulate *some* supportable reason why the [permit issuer] erred in its permit decision in order for the petitioner's concerns to be meaningfully addressed by the Board.").

[15] The cross-reference appears to be in error because section 122.42 has no subsection (g). The proper cross-reference should be to 40 C.F.R. § 144.52(a)(7). *See* 48 Fed. Reg. 14,146, 14,151 (Apr. 1, 1983) (deconsolidating permit program regulations and moving UIC requirements to new part 144).

## VI. *CONCLUSION*

As explained above, the Board is unable to determine based on the current state of the record if the Region has fulfilled its regulatory obligation to consider relevant geological data, 40 C.F.R. § 146.24(a)(2), (6), to address the concerns raised as to seismic activity that relate to the geology of the proposed well placement, and to ensure that the proposed well is "sited in such a fashion that [it] inject[s] into a formation which is separated from any [underground source of drinking water] by a confining zone that is free of known open faults or fractures." 40 C.F.R § 146.22(a). The permit therefore is remanded to the Region to allow the Region the opportunity to cure the record deficiencies. The Region must articulate clearly and explain the data relied upon in its conclusions regarding the risk from earthquakes. If the Region decides to reissue the permits, the Region shall include specific and detailed findings and make those findings available to the public for review and comment. Review is denied on all other issues.

So ordered.