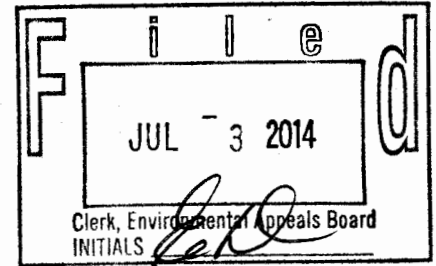


**BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC**



_____)
In re:)

West Bay Exploration Co.)

UIC Permit No. MI-075-2D-0010)
_____)

UIC Appeal No. 14-67

ORDER DENYING REVIEW

Sandra K. Yerman (“Petitioner” or “Ms. Yerman”) seeks review of the U.S. Environmental Protection Agency (“EPA”) Region 5’s (“Region”) issuance of an Underground Injection Control (“UIC”) Permit to West Bay Exploration Company (“West Bay”) pursuant to Part C of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. §§ 300h - 300h-8.¹ The Permit authorizes construction and operation of a Class II injection well, referred to as “Haystead #9 SWD”, in Jackson County, Michigan, for the disposal of noncommercial brine from oil and gas

¹ Ms. Yerman’s petition was filed with the Board on May 14, 2014, which is two days past the due date for appeal of the Permit. Petitioner has asked that the Board nonetheless accept the Petition. The Region concurs in Petitioner’s request but Peter Bormuth, who has also appealed the Permit, has filed an opposition. Petitioner has provided evidence that the Petition was correctly addressed and timely mailed by U.S. Express Mail but an error in routing by the U.S. Postal Service delayed delivery. Although the Board does not normally accept late-filed petitions, it has done so in special circumstances – such as where a mail delivery firm experiences technical difficulties. *In re AES Puerto Rico LP*, 8 E.A.D. 324, 329 (EAB 1999), *aff’d sub nom. Sur Contra La Contaminación v. EPA*, 202 F.3d 443 (1st Cir. 2000) (accepting petition filed one day late due to aircraft problems experienced by Federal Express). Because the delay in filing is due to an error by the Postal Service, the Board concludes that special circumstances exist to accept the Petition.

production wells. Petitioner asserts that the proposed well endangers underground drinking water sources based on a highly technical argument involving the possible injection of “frac sand” used in hydraulic fracturing and on the claim that the well site is adjacent to underground vertical channels. The Board denies the Petition because Ms. Yerman has failed to meet the threshold requirements for Board review under section 124.19 of title 40 of the Code of Federal Regulations for both issues.

Section 124.19 requires that a petition for review of a UIC permit contain, at a minimum, three essential components: (1) a clear identification of the contested permit condition or other specific challenge to the permit decision at issue, which must be based on either a clear error of fact or law or an exercise of discretion or important policy consideration warranting the Board’s review; (2) a demonstration that any issue being raised on appeal has been preserved for Board review (i.e., was raised during the public comment period or public hearing on the draft permit), or an explanation as to why the issue was not required to be raised; and (3) argument, with factual and legal support, as to why the permit condition or other challenge warrants review by the Board, including an explanation as to why the Region’s response to comment on the issue raised, if any, was clearly erroneous or otherwise warrants review. *See* 40 C.F.R. § 124.19(a)(4) (2013).

The burden of demonstrating that these three threshold requirements have been met is on the petitioner. 40 C.F.R. § 124.19(a)(4). The petitioner bears that burden even when the petitioner is unrepresented by counsel (or *pro se*), as is the case here. *In re New Eng. Plating Co.*, 9 E.A.D. 726, 730 (EAB 2001); *In re Encogen Cogeneration Fac.*, 8 E.A.D. 244, 249-50 (EAB 1999). The Board generally endeavors to construe liberally the issues presented by a *pro*

se petitioner, so as to fairly identify the substance of the arguments being raised. The Board nevertheless “expects the petitions to articulate some supportable reason or reasons as to why the permitting authority erred or why review is otherwise warranted.” *In re Sutter Power Plant*, 8 E.A.D. 680, 688 (EAB 1999); accord *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 19 (EAB 1994).

Ms. Yerman has not carried her burden of meeting the essential threshold requirements for either of the two issues in her Petition. First, she has not demonstrated that the technical challenge she has made concerning frac sand was presented to the Region during the public comment period. Second, she has not presented any factual or legal support for her claim concerning vertical channels adjacent to the well site.

I. “Frac Sand” Issue

Frac sand is a “proppant” used in hydraulic fracturing operations “to prop open artificially created or enhanced fractures.” Ex. B-17, at 30 (EPA Response to Public Comment Document (April 9, 2014) (“RTC”). Petitioner claims that frac sand could be included in West Bay’s brine injectate and, therefore, the Region should have decreased the maximum injection pressure (“MIP”) allowed under the Permit.² Specifically, Petitioner argues that the Region’s calculation of the MIP was faulty because the Region should have applied a higher safety factor in estimating the specific gravity of the brine injectate, to account for the possible presence in the injectate of

² The UIC regulations require that injection wells be operated in a manner such that “[i]njection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to the USDWs [underground sources of drinking water].” 40 C.F.R. § 146.23(a)(1). The Region imposed a MIP limitation in the Permit for this purpose. See Ex. B-9 at A-1 of 1 (Draft Permit #MI-079-2D-0010 for the Haystead #9 SWD (March 27, 2013)).

frac sand or other proppants. Petition at 1. According to the Petitioner, this would have resulted in calculation of a lower MIP. *Id.*

This highly technical issue, however, was not preserved for appeal to the Board because it was not presented to the Region during the public comment process. As noted above, section 124.19, as well as Board precedent, limits permit appeals to issues raised during the public comment period. Importantly, comments must be raised with sufficient specificity and clarity that the permitting authority has an opportunity to address the concerns raised before the permit is issued. *In re Westborough*, 10 E.A.D 297, 304 (EAB 2002).³ This is essential for the integrity and efficiency of the permitting process. *In re BP Cherry Point*, 12 E.A.D. 209, 219 (EAB 2005). The permitting authority is in a better position to make timely and appropriate changes to permits before they are finalized. Moreover, initial decisions on permit matters should be made by the permitting authority because that “ensures that the locus of responsibility for important technical decisionmaking rests primarily with the [administrative body] * * * which has the relevant specialized expertise and experience.” *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005) (justifying deference by the Board to the permitting authority on technical issues based on the same rationale).

³ See also *In re ConocoPhillips Co.*, 13 E.A.D. 768, 801 (EAB 2008) (expressing “extensive concern” in comments about greenhouse gases does not preserve the issue of whether a [Best Available Control Technology] analysis is needed for those pollutants); *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 229 (EAB 2000) (concluding that, although petitioner had commented that the permit should contain continuous monitoring, this comment did not preserve the specific argument that the [New Source Review] Manual required continuous monitoring).

Petitioner points to several public comments and the Region's response to one of those comments to show that she or another commenter challenged the MIP determination based on an allegedly faulty specific gravity calculation. Petition at 2. These references include two comments Petitioner made concerning frac sand, and another commenter's remarks on the possibility that underground injection could cause earthquakes. She also cites the Region's response to the earthquakes comment, which discusses how the specific gravity of the brine injectate was calculated and utilized in the determination of the MIP. As explained below, however, these references concerned different issues and fail to carry Petitioner's burden of showing that the specific challenge to the MIP determination raised in her Petition was raised during the public comment period.

The first of Petitioner's frac sand comments on the draft permit reads:

If West Bay reinjects fracturing fluids into its Class II disposal well, will the sand inherent in fracturing fluids, reinjected under pressure, hold open any fissures in the rock layer of the confining zone, and eventually allow injectate to migrate up into the USDWs?

Ex. B-10, at 3 (Comments Submitted to EPA by Sandra K. Yerman (May 10, 2014)). This comment asks the Region to consider whether frac sand may hold open fractures, but does not contend that frac sand either causes fractures or is relevant to the calculation of MIP. It contains no reference to specific gravity and, most importantly, no argument that the MIP was calculated incorrectly or should be lowered. Therefore, this comment does not support Petitioner's assertion that she presented to the Region her claim that the MIP was too high.⁴

⁴ The Region's response to this comment demonstrates that the Region also did not understand this comment as a challenge to its MIP determination. The Region responded by noting that large amounts of frac sand are not expected in West Bay's brine injectate. Additionally, the Region noted that the injectate is not expected to escape the confining layer

Subsequently, Petitioner filed an addendum to her comments, adding the following question regarding frac sand:

To my Q.1 re: sand in fracturing fluids, please apply the Theis equation/computer modeling etc. to vertical (zone to USDW) fissures created by max inj. Pressure, and/or increase in max. inj. press. Give me print-out.

Ex. B-10 at 10 (Addendum to Comments Submitted to EPA by Sandra K. Yerman (May 14, 2014)). Like her first comment, this second comment contains no reference to specific gravity and no argument that the MIP was miscalculated or should be lowered. Instead, the second comment addresses a separate issue. It asks the Region to “apply” an equation – the Theis equation – that EPA’s regulations specify may be used for calculating how far injected waste may spread underground.⁵ See RTC at 40 (“At the request of the commenter, EPA used the modified version of the Theis equation found in the UIC regulations at 40 C.F.R. § 146.6 to model the zone of influence.”). Importantly, the Theis equation is not used to calculate the MIP.⁶ As the draft permit made clear, the MIP is calculated using a wholly different formula.⁷

because there are currently no fractures in that layer and it is unlikely that waste injection would cause fractures due to the limitation imposed by the MIP. RTC at 30-31.

⁵A modified version of the Theis equation is designated in EPA’s UIC regulations as a method for determining the “zone of endangerment” for injection wells. 40 C.F.R. § 146.6(a)(2). The zone of endangerment is defined as the “[lateral] area * * * in which the pressures in the injection zone may cause the migration of the injection and/or formation fluid * * *.” *Id.* § 146.6(a).

⁶ See 40 C.F.R. § 146.6(a)(2) (modified Theis equation solves for the “[r]adius of endangering influence from injection well (length)”).

⁷ See Ex. B-9 at A-1 of 1 (Draft Permit #MI-079-2D-0010 for the Haystead #9 SWD) (describing the equation used to calculate MIP).

Therefore, the Petitioner is incorrect in claiming that her comment asking the Region to apply the Theis equation fairly presented the argument in her Petition about MIP understatement.

In addition to her two comments on frac sand, Petitioner claims that another commenter, Mr. Peter Bormuth, challenged the Region's MIP and specific gravity calculations in a comment concerning the proposed well's potential to induce seismic activity. Petition at 2 (citing comments of Mr. Peter Bormuth). That comment cites factors that the Ohio Department of Natural Resources considers relevant to determining whether a waste injection well could induce an earthquake. One of those factors is the pressure at which fluids are injected. RTC at 8-9 (reprinting Mr. Bormuth's comment). Mr. Bormuth's comment did not mention frac sand, however, much less suggest that the presence of frac sand may influence the specific gravity of brine injectate or the calculation of the MIP. *Id.* Accordingly, Mr. Bormuth's comment does not support Petitioner's claim that her frac sand argument was raised during the public comment period.⁸

In sum, while Petitioner has identified general comments related to frac sand, MIP, and fractures, she has not shown that the highly technical issue she raises on appeal – whether the Region's MIP determination and the specific gravity calculation for the brine injectate are flawed due to the Region's failure to take into account the potential for the injectate to contain frac sand – was presented to the Region during the public comment period with sufficient specificity

⁸ Petitioner also cites to the Region's response to Mr. Bormuth's earthquake comment in an attempt to show that a frac sand-based challenge to the MIP was raised to the Region. The Region's response to Mr. Bormuth's comment, however, makes absolutely no mention of frac sand. *See* RTC at 9-13.

and clarity to enable the Region to consider and respond to the comment. Accordingly, the Board finds that this issue was not preserved for appeal and denies review.

II. Vertical Channels Issue

The second issue raised by Petitioner on appeal is that the Permit should not be approved under 40 C.F.R. § 144.40(a)(2) because West Bay failed to disclose information during the permit process regarding vertical channels adjacent to the proposed injection well. Petition at 3. Petitioner further claims that injected waste could “seep” through the non-disclosed vertical channels into underground drinking water sources. *Id.* at 4. Petitioner, however, cites no evidence or argument to show that this alleged non-disclosure by West Bay actually occurred or that any vertical channels exist. This is fatal to Petitioner’s claim. Section 124.19(a)(4) requires that a petition for review must not only identify what aspect of the permit is being challenged, but the petition must also “clearly set forth, *with legal and factual support*, petitioner’s contentions for why the permit decision should be reviewed.” 40 C.F.R. § 124.19(a)(4) (emphasis added). Because Petitioner has set forth no legal or factual support for this claim, the Board denies review of this issue. *See In re Seneca Resources Corp.*, UIC Appeal Nos. 14-01 to -03, slip op. at 5 (EAB May 29, 2014), 16 E.A.D. ___ (denying review of generalized and unsubstantiated claims); *In re Prairie State Generating Co.*, 13 E.A.D. 1, 61, 74, 77 (EAB 2006) (denying review of claims considered “speculative” because of a failure to cite any supporting record evidence).

III. Conclusion

For the foregoing reasons, the Petition is denied. Because another petition is pending on this Permit, the Region should not issue a final permit decision prior to the Board's resolution of the other appeal. *See* 40 C.F.R. § 124.19(l)(2).

So ordered.

Dated:

7/3/14

ENVIRONMENTAL APPEALS BOARD⁹

By:



Catherine R. McCabe
Environmental Appeals Judge

⁹ The three-member panel deciding this matter is composed of Leslye M. Fraser, Catherine R. McCabe, and Kathie A. Stein.

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **Order Denying Review** in the matter of West Bay Exploration Co., UIC Appeal No. 14-67 were sent to the following persons in the manner indicated:

By U.S. First Class Mail:

Sandra K. Yerman
6600 Riverside Rd.
Brooklyn, MI 49230

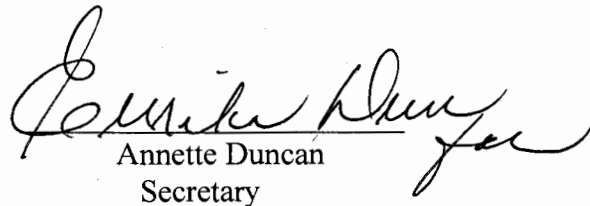
Timothy Brock
West Bay Exploration Company
13685 South West Bay Shore Dr.
Suite #200
Traverse City, MI 49684

Peter Bormuth
142 W. Pearl St.
Jackson, MI 49201

By Pouch Mail:

John P. Steketee
Associate Regional Counsel
U.S. EPA, Region 5 (C-14J)
77 W. Jackson Blvd.
Chicago, IL 60604

Dated: *7/3/2014*


Annette Duncan
Secretary