BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
Florence Copper, Inc.	)	
	)	Appeal No. UIC 17-02.
UIC Permit No. R9UIC-AZ3-FY11-1	)	

REGION 9 RESPONSE TO PETITION FOR REVIEW

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I. INTRODUCTION

The United States Environmental Protection Agency ("EPA"), Region 9 ("Region") hereby responds to the Petition for Review ("Petition") submitted by the Gila River Indian Community ("Petitioner"). On December 20, 2016, the Region issued a Class III Underground Injection Control ("UIC") Area Permit (Permit No. R9UIC-AZ3-FY11-1) ("Permit") to Florence Copper Inc. ("FCI") for an In-Situ Copper Production Test Facility under the UIC Program of the Safe Drinking Water Act ("SDWA"), 42 U.S.C. § 300h *et seq*. Pursuant to 40 C.F.R. § 124.19, Petitioner filed its Petition on January 19, 2017, with the Environmental Appeals Board ("EAB" or "Board") to seek review of the Permit. Four petitions for review of the FCI Permit were filed with the EAB; one was dismissed as untimely. The Region will respond to each of the remaining three petitions separately.[1] Attached to this response are a certified index of the Administrative Record for the challenged Permit and the relevant portions of the Administrative Record.

In the Petition for Review, Petitioner requests Board review of: 1) whether the Region erroneously permitted "exotic, unspecified chemicals to be deliberately injected down wells and into the surrounding, integrated groundwater system;" 2) whether the Permit's groundwater monitoring conditions are sufficient; and 3) whether the Region provided adequate responses to Petitioner's comments. Petition at 6. As set forth below, the Region's permit decision was made in accordance with UIC regulations and is supported by an extensive Administrative Record. Petitioner has not demonstrated how the Region's response to comments was inadequate or otherwise identified any clearly erroneous findings of fact or conclusions of law that would require review by the Board. The Petitioner has failed to meet its burden to obtain review by the EAB, and the Region requests that the EAB deny the Petition.

II. LEGAL AND FACTUAL BACKGROUND

Congress enacted the SDWA in 1974 to ensure that the Nation's sources of drinking water are protected against contamination and "to prevent underground injection which endangers drinking water sources." 42 U.S.C. § 300h(b). The SDWA directs the EPA to promulgate regulations containing minimum requirements for state programs to protect underground sources of drinking water ("USDWs"). 42 U.S.C. § 300(h). The UIC program regulations cover the construction, operation, permitting and closure of injection wells used to place fluids underground. 40 C.F.R. Parts 144-148. The EPA directly implements the UIC regulations and issues permits in states without an approved UIC program. 40 C.F.R. § 144.1(e). Because the State of Arizona has not received approval to implement the UIC Program, the Region is the permitting authority in Arizona. *See* 40 C.F.R. § 144.1(e); 40 C.F.R. §§ 147.1(a-b), 147.151 (Subpart D).

[1] The other two extant petitions were filed by John Anderson and a joint petition from Southwest Value Partners (SWVP) and the Town of Florence, Arizona.

The SDWA requires a person to obtain a permit to operate an underground injection well, unless the well is authorized by rule. 42 U.S.C. § 300h-3(b), 40 C.F.R. § 144.11. Central to the permitting requirements in the UIC regulations is a stringent non-endangerment standard for UIC permits. These regulations prohibit injection activities that allow the movement of fluid containing contaminants into a USDW if the presence of the contaminant may cause a violation of drinking water standards or otherwise adversely affect human health. 40 C.F.R. §§ 144.1(g), 144.12. The regulations define six classes of wells; Class III wells are defined as injection wells for the extraction of minerals, such as copper. 40 C.F.R. § 144.6(c). UIC regulations also allow the EPA to exempt an aquifer or a portion of an aquifer when certain criteria are met and to permit activities such as in-situ mining in exempt aquifers, where it can be done in a manner that is protective of USDWs outside of the exempt portion of the aquifer. 40 C.F.R. § 146.4. Once the EPA approves an aquifer exemption, the exempt portion is no longer considered a USDW as defined in 40 C.F.R. § 144.3, and it is not protected as a USDW under UIC regulations.

The EPA Region 9 Water Division Director has authority to issue permits for underground injection activities under 40 C.F.R. § 144.31 (AR #586, #587). FCI applied for a UIC permit to construct and operate a pilot-scale in-situ copper recovery ("ISCR") facility known as the Production Test Facility ("PTF") on FCI property near the town of Florence, Arizona. FCI will use wells to inject a dilute sulfuric acid solution into the ore-body and recover copper-laden solution to produce copper and to assess the feasibility of future commercial ISCR operations on the FCI property.

Factual Background: Past UIC Class III Permit and Copper Recovery Activity

The EPA issued UIC Permit # AZ396000001 to BHP Copper, Inc. (BHP) in 1997 authorizing BHP to operate an ISCR facility on what is now the FCI property. At the same time, the EPA also approved an aquifer exemption for the proposed mining area ("Aquifer Exemption"). In accordance with requirements at 40 C.F.R. §§ 146.4 and 144.7, the Region determined the federal aquifer exemption criteria were satisfied because the aquifer did not serve as a current source of drinking water and would not in the future serve as a source of drinking water because it contained commercially producible quantities of copper (Statement of Basis ("SOB") at 12-15, AR #18, #24, #238). The Aquifer Exemption includes the Oxide Bedrock Zone, which is approximately 475 to 1,200 feet below ground level and contains the copper ore body, and a portion of the Lower Basin Fill Unit (LBFU), which is approximately 400-1,600 feet below ground and is the portion of the aquifer immediately above and in contact with the Oxide Bedrock Zone (Permit Appx. A, Figure S-2, AR #596a). The Aquifer Exemption was not challenged under the judicial review provisions of the SDWA and remains in place today. *See* 42 U.S.C. § 300j-7(a)(2).

Pursuant to its UIC Permit, BHP drilled four Class III injection wells, nine recovery wells, and seven observation wells into the Oxide Bedrock Zone. These wells were part of a pilot project to demonstrate hydraulic control, which is a system designed to prevent migration of fluids outside the exempted area. BHP did not develop a full-scale facility and in 2000, sold the property to Merrill Mining, LLC, who sold it in 2010 to Curis Resources (Arizona), Inc., later known as FCI.

Factual Background: UIC Class III Permit for Production Test Facility

FCI initially submitted an application for a Class III UIC Permit in March 2011 to amend and transfer the BHP UIC permit. It sought authority to construct and operate the ISCR project on both a pilot scale and a commercial basis on 212 acres of property it owned or leased under the Arizona State Mineral Lease No. 11-26500. In June 2012, after conferring with the Region, FCI revised the application to seek authorization to construct and operate a PTF operation on 13.8 acres located within the State Mineral Lease. Over approximately two years, FCI provided substantial supplemental information to modify and update the permit application (*See* AR #1-15). Under the revised application, the PTF operations were limited to a small portion of the exempted aquifer below the State Mineral Lease boundary (*See* Permit, Appx. A, Figure S-1, AR #596).

Due to the passage of time since the 1997 Aquifer Exemption, the Region reviewed the existing Aquifer Exemption to determine whether the subsurface area affected by the PTF injection continued to meet the criteria for exemption under the UIC regulations (SOB at 12-15, AR #18). In addition, the Region reviewed the existing Aquifer Exemption and determined that the injected fluids associated with the PTF activity will be fully contained within the existing exempted area (*Id*.). After completing a thorough technical review of all submitted information, the EPA determined that the information provided by FCI was sufficient to prepare a draft permit.

On December 7, 2014, the Region issued a draft UIC permit to FCI, provided an opportunity for public comment and held a public hearing on January 22, 2015 in Florence, Arizona, pursuant to 40 C.F.R. § 124.12. The Region extended the public comment period from the required 30 days to 129 days due to interest from the public (AR #21-22). The Region also provided supplemental data to the public for review and comment regarding historical modeling and field test reports for the BHP facility (AR #22). *See* 40 C.F.R. § 124.10(b). The Region received approximately 300 comments in total during in the public comment process, including testimony at the public hearing (*See* AR #327-579). Petitioner's comments included a combined 30 pages of material on historic preservation and permit matters (AR #572-73.).

The Region also conducted extensive consultation beginning in 2012 under Section 106 of the National Historic Preservation Act (NHPA) to identify, assess and resolve potential

adverse effects of the PTF on historic properties located on the FCI property.[2] This process included the Petitioner, the Advisory Council on Historic Preservation ("ACHP"), FCI, three other federally-recognized tribes, the Arizona State Historic Preservation Officer, the Arizona State Land Department, National Park Service, Arizona State Museum, Archaeology Southwest, and the Town of Florence. The consultation included in-person site visits to the FCI property, several conference calls, and numerous communications seeking input from consulting parties at each step of the process. The consultation culminated with a Memorandum of Agreement (MOA), to resolve adverse effects of the PTF, which was executed by signatory parties, including the ACHP in February 2015 (Permit, Appx. G, AR #596g).

The EPA also consulted with the GRIC and other tribes pursuant to the *EPA Policy on Consultation and Coordination with Indian Tribes*, which states that the EPA should consult on a government-to-government basis with federally recognized tribal governments when EPA actions and decisions may affect tribal interests. While the Permit activities occur off-reservation, the historical artifacts found on the FCI property and subject to the NHPA protections are connected to ancestors of several southern tribes. The Region conducted two in-person consultation meetings with Petitioner in Arizona, and several teleconferences regarding the permit application and draft Permit, and modified terms of the NHPA MOA and the Permit itself to respond to the Petitioner's feedback and concerns (AR # 580, #581, *See* AR #28-235 for index summary of NHPA and government-to-government consultation).

The Region carefully considered all comments received and as provided in 40 C.F.R. § 124.17, prepared a 48-page Response to Comments (RTC) (AR #581). The Region made 26 changes to the final Permit from the draft permit, mostly to address concerns raised by the commenters (RTC at 1-5, AR #581). The Region's engineers and contractor personnel extensively reviewed the application and draft permit to ensure that they met the requirements of the SDWA and UIC regulations. The broad scope of that review is evidenced by the extensive Administrative Record, which contains close to 600 entries (Appendix A). The Region considered all comments, including the issues identified by the tribes during the consultation on the Permit and the NHPA, before issuing the final Permit to FCI on December 20, 2016.

The Final Permit allows FCI to operate the PTF for the approximate two-year operational life of the project and requires it to conduct five years of post-closure monitoring, which may be extended if the EPA determines it is necessary (Permit Part I, p. 6-7, AR #596). Prior to operating the PTF, FCI must demonstrate that it has satisfied the Permit requirements for well construction, plugging and abandonment of existing wells, financial responsibility, and specific operational parameters (Permit Part II, Sections C, D, E-2, and L, AR #596). For example, FCI must obtain $4,457,000 in financial responsibility to guarantee aquifer restoration, ground water

[2] 54 U.S.C. § 306108, 36 C.F.R. Part 800.

monitoring, and plugging and abandonment activities before the EPA will authorize FCI to proceed with construction and operation of the PTF (Permit Part II.L.1.a, AR #596).

The Permit contains specific parameters for mechanical integrity, injection fluid constituents, pressure, and volume, and the Region must approve any modifications to these parameters (Permit Part II.E.1-5, AR #596). The PTF is surrounded by eight monitoring wells located within the 500-foot Area of Review ("AOR"). This area defines a subsurface zone affected by the wellfield injection activities, as described in 40 C.F.R. § 146.6(a)(1)(ii) (*See* Permit Part I, p. 6, AR #596). FCI is required to drill the PTF injection wells deeper than 40 feet below the top of the Oxide Bedrock Zone within the existing EPA-approved Aquifer Exemption area (*Id*.).

FCI must apply for a new permit should it want to construct and operate a commercial scale ISCR mine on the property, pending the outcome of the PTF operations. The EPA would evaluate any future permit application for a commercial scale ISCR pursuant to the same criteria in the SDWA and implementing regulations. If the Region issued a new draft permit, it would require the same public notice and comment procedures, and commenters would have the ability to seek EAB review if the Region issued a final permit.

III. STANDARD OF REVIEW

The standard of review for appeal of an EPA-issued UIC permit issued is governed by 40 C.F.R. § 124.19. In any appeal from a permit granted under 40 C.F.R. Part 124, the petitioner bears the burden of demonstrating that review is warranted. 40 C.F.R. § 124.19; see *In re Pennsylvania Gen'l Energy Co. LLC*, UIC Appeal Nos. 14-63, 14-64, & 14-65, slip op. at 4 (EAB Aug. 21, 2014); *In re City of Palmdale*, 15 E.A.D. 700 (EAB 2012); *In re Wash. Aqueduct Water Supply Sys*., 11 E.A.D. 565, 573 (EAB 2004); *In re Am. Soda, LLP*, 9 E.A.D. 280, 286 (EAB 2000). To obtain review, the petitioner must identify the contested permit condition and show that 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 Environmental Appeals Board should, in its discretion, review." 40 C.F.R. § 124.19(a)(4)(i); *See In re Guam Waterworks Auth.,* 15 E.A.D. 437, 443 n. 7 (EAB 2011); *In re Environmental Disposal Sys., Inc*., 12 E.A.D. 254, 263 (EAB 2005).

The petitioner must also demonstrate that each issue raised in the petition was raised during the public comment period, and for each issue that was not raised previously, the petition must explain why it was not required to be raised during the public comment period as required by 40 C.F.R. § 124.13. Additionally, if the petition raises an issue that the EPA addressed in the response to comment document, the petitioner must provide a specific citation to the relevant comment and response, and explain why the EPA's response was clearly erroneous or otherwise warrants review. 40 C.F.R. § 124.19(a)(4)(ii). *See EAB Practice Manual (Aug. 2013)* at 45; *In re*

City of Attleboro, 14 E.A.D. 398, 405 (EAB 2009), ("[T]he Board will not entertain vague or unsubstantiated claims."); *In re Westborough,* 10 E.A.D. 297, 305, 311-312 (EAB 2002) (noting that "a petitioner must demonstrate with specificity in the petition why the Region's prior response to those objections is clearly erroneous or otherwise merits review"). The Board has held that "mere allegations of error" are not enough to warrant review. *See In re City of Attleboro*, 14 E.A.D. 398, 405-406, 418, 432, 440 (EAB 2009). Applying these principles, the EAB denies review where the petitioner merely reiterates or attaches comments previously submitted regarding a draft permit and does not engage the EPA's responses to those comments. *See also In re Cherry Berry B1-25, SWD*, UIC Appeal No. 09-02 (EAB Aug. 13, 2010) (Order Denying Review) at 5 ("This Board has frequently stated that [i]t is not sufficient simply to repeat objections made during the comment period; instead, a petitioner must demonstrate why the permit issuer's response to those objections is clearly erroneous or otherwise warrants review."); *In re Chukchansi Gold Resort,* 14 E.A.D. 260, 264 (EAB 2009) ("Assuming the issues have been preserved, the petitioner must then explain with sufficient specificity why a permit issuer's previous response to those objections [raised during the public comment period on the draft permit] were clearly erroneous, an abuse of discretion, or otherwise warrant Board review.").

The preamble to the original EAB permit appeal provisions at 40 C.F.R. § 124.19 states that "this power of review should only be sparingly exercised," and that "most permit conditions should be finally determined [by the permitting authority]." (Consolidated Permit Regulations) 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). *See In re City of Attlebor*o, 14 E.A.D. 398, 405 (EAB 2009); *In re Environmental Disposal Sys., Inc*., 12 E.A.D. 254, 263-64 (EAB 2005); *In re Scituate Wastewater Treatment Plant,* 12 E.A.D. 708, 717 (EAB 2006); *In re City of Moscow*, 10 E.A.D. 135, 140-41 (EAB 2001); *In re Jett Black, Inc.*, 8 E.A.D. 353, 358 (EAB 1999); *In re Maui Electric Co*., 8 E.A.D. 1, 7 (EAB 1998). Subsequent revisions to Part 124 did not expand the scope of review. *See* Revisions to 40 C.F.R. Part 124, 78 Fed. Reg. 5281, 5284 (Jan. 25, 2013) ("…the revised language is not intended to expand the Board's existing scope of review.").

On matters that are fundamentally technical or scientific in nature, the Board will typically defer to a permit issuer's technical expertise and experience, as long as the permit issuer adequately explains its rationale and supports its reasoning in the administrative record. *In re City of Palmdale*, 15 E.A.D. 700, 705 (EAB 2012); *See also In re Beeland Group, LLC*, 14 E.A.D. 189, 196 (EAB 2008); *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 510 (EAB 2006); *In re Russell City Energy Ctr*., 15 E.A.D. 1, 66 (EAB 2010), *petition denied sub nom.; Chabot-Las Positas Cmty. Coll. Dist. v. EPA*, 482 Fed. Appx. 219 (9th Cir. 2012); *In re Peabody W. Coal Co*., 12 E.A.D. 22, 41, 46, 51 (EAB 2005); *In re NE Hub Partners, L.P*., 7 E.A.D. 561, 570-71 (EAB 1998). Further, "[w]hen issues raised on appeal challenge a Region's technical judgments, clear error or a reviewable exercise of discretion is not established simply

because petitioners document a difference of opinion or an alternative theory regarding a technical matter." *In re NE Hub* 7 E.A.D. at 567.

In addition, the Board's authority to review a UIC permit does not extend beyond the goals of the UIC program to protect USDWs. *See In re Environmental Disposal Sys., Inc.*, 12 E.A.D. 254, 266 (EAB 2005); *See also In re Sunoco Partners Marketing & Terminals, LP*, UIC Appeal No. 05-01, slip op. at 10 (EAB June 1, 2006); *In re Envotech, L.P.*, 6 E.A.D. 260, 264, 286 (EAB 1996) ("[T]he SDWA ... and the UIC regulations ... establish the *only* criteria that EPA may use in deciding whether to grant or deny an application for a UIC permit.") (emphasis in the original).

IV. ARGUMENT

In its Petition for Review, Petitioner requests Board review of: 1) whether the Region erroneously permitted "exotic, unspecified chemicals to be deliberately injected down wells and into the surrounding, integrated groundwater system;" 2) whether the Permit's "quarterly" groundwater monitoring conditions are sufficient; and 3) whether the Region provided adequate responses to Petitioner's comments. Petition at 6. The UIC regulations clearly identify the information that must be included in permit applications, the factors that the EPA must consider in acting on the applications, and the conditions that must be included in each permit. The Region's permit decision was made in accordance with law and is supported by an extensive record, including thorough responses to comments made during the public comment period, including Petitioner's comments. Despite the Region's well documented record, the Petitioner misconstrues the conditions contained in the Permit and seeks to substitute its technical and policy preferences for the Region's decisions and determinations. However, Petitioner has not demonstrated how the Region's response to its comments were inadequate or otherwise identified any clearly erroneous findings of fact or conclusions of law that would require review by the Board.

A. The Permit Provides Protection of USDWs Consistent with Regulations, Is Supported by Evidence in the Record and Not Clearly Erroneous, and the Region Adequately Responded to Comments from Petitioner on This Issue

Central to the permitting requirements in the EPA UIC regulations is a stringent non-endangerment standard to protect USDWs. The EPA regulations prohibit injection activities that allow the movement of fluid containing contaminants into a USDW if the presence of the contaminant may cause a violation of drinking water standards or otherwise adversely affect the health of persons. 40 C.F.R. §§ 144.1(g), 144.12. Consistent with UIC regulations, the Permit provides protections for USDWs through comprehensive requirements to prevent migration of fluids due to injection activity. The Permit provides protection of USDWs in accordance with 40 C.F.R. Part 144 ("Underground Injection Control Program") and Part 146 Subpart D ("Criteria

and Standards Applicable to Class III Wells") through permit conditions for well construction, operational requirements and monitoring and testing during the life of the permit and post-injection aquifer restoration and closure (Permit Part II.B.2-3, C, E-F, H, I, AR #596). Petitioner fails to specify or cite specific permit conditions or a permit decision that is clearly erroneous.

i. *Permit Conditions Contain Specific Limits on Injected Fluids and Are Consistent with UIC Regulations*

Without reference to specific permit conditions, Petitioner claims that the Permit "record neither reveal what specific compounds would be used nor limits the pool of possible compounds by name" and further suggests this "…has opened the door for Florence Copper to use concentrations of compounds (such as solvents) that, when started in groundwater systems at concentrations this high, have degraded square miles of what then became federal Superfund sites." Petition at 8. Petitioner has not cited any factual support for this assertion, and in fact, the Permit contains specific limitations and conditions on the injection fluids allowed in the Class III wells under the Permit. The Petitioner has not pointed to Permit conditions that are not in accordance with law or pointed to any finding of fact or conclusion of law by the Region that is clearly erroneous.

In fact, the Region included specific fluid limitations in the Permit in accordance with 40 C.F.R. Part 146 Subpart D. For instance, as required by 40 C.F.R. § 146.34(a)(7)(iii), the Region required FCI to submit a qualitative analysis and the ranges of concentrations of all constituents of injected fluids (Revised FCI Application, Operating Data Sec. H6, AR #2f). [3] The Permit limits the types of fluids injected to fluids generated by the PTF operation and authorized under the Permit, and defines the type and concentration of organic and inorganic constituents and pH levels in the dilute sulfuric acid solution utilized for the copper recovery (Permit Part III.E.6, "Injectate Fluid Limitations," *see also* Permit Part II.F.7, AR #596). Part II.E.6(d) of the Permit, requires organic compounds in the solution used for mining copper, called "lixiviant", to be limited to those listed in Part II.F.7(a) of the Permit (AR #596). In addition, before the PTF operation can commence, FCI must submit a report for approval by the Region that includes the name and grade of each process chemical that is proposed to be used in the solution mining operation, including recommendations and justifications, as to which constituents of the reported chemicals should be subject to the monitoring program in the Permit. Part II.E.6(f) requires that:

> at least 30 days prior to commencement of the PTF operations, the permittee submit a report for the director's approval that includes the name and grade of each process chemical that is proposed to be used at the PTF that fits in one of the three following categories: (1) organic compounds to be used in the [solvent extraction/electrowinning

[3] 40 C.F.R.§ 146.34(a) sets forth information the permitting authority must consider before issuing a Class III permit, including qualitative analysis and ranges of concentrations of constituents of injected fluid. 40 C.F.R.§ 146.34(a)(7)(iii). FCI submitted an estimated analysis of the constituents in the injected solution, detailed in the Permit Appx. E, Table 3.1. "Estimated Composition of Pilot Test Facility Process Solutions" (AR #596e.).

> "SX/EW"] process; (2) sulfuric acid to be used in the SX/EW process or to prepare solutions for injection; (3) sodium carbonate or other chemicals to be injected, or to be used in ISCR solutions.

(AR at #596). The Region must approve any changes to the process chemicals and fluid solutions proposed for use in the operation prior to use, and the Region may increase monitoring requirements as a result (Permit Part III.E.6.g-f, AR #596).

In addition, the Region considered the "nature and volume of the injected fluid" when determining the number, location, construction and frequency of monitoring wells in the final Permit, in accordance with 40 C.F.R. § 146.32(h)(5) (*See* Permit II.F "Monitoring Program," AR #596.).

The Petitioner raises vague assertions that the Permit allows contamination of "the surrounding, integrated groundwater system." Petition at 6. The Petitioner does so without specifying contested permit conditions, which is required for Board review under 40 C.F.R. § 124.19(a). Despite Petitioner's claim, the Permit contains many conditions to control the injected fluids in the surrounding groundwater system. It requires hydraulic control of injected fluids, prohibits the migration of injected fluid to exempted aquifer areas outside the PTF well injection area, and protects USDWs situated beyond the Aquifer Exemption boundaries (Permit Part II.E1, F.5, H, I, AR #596). The Region crafted specific permit conditions for monitoring and contingency plans for loss of hydraulic control that are fully protective of USDWs and in accordance with UIC regulations. The monitoring of recovery and injection rates on a continuous and daily basis, in addition to measurements of electrical conductivity and water levels in observation and recovery wells on a daily and weekly basis, will mean that FCI can recognize and react to a potential loss of hydraulic control on a timely basis. Excess extraction rates of subsurface fluids over injection rates will ensure that an inward hydraulic gradient is maintained toward the PTF wellfield and electrical conductivity monitoring will detect lateral or vertical excursions of ISCR fluids and allow for operational changes to control such excursions, in the unlikely event they should occur. In addition, the permit includes mechanisms to detect any potential fluid movement outside the wellfield before it could reach surrounding USDWs, including observation wells at the wellfield perimeter, supplemental monitoring wells within 300 feet of the wellfield, and Point of Compliance (POC) wells located beyond the monitoring wells, but within the aquifer exemption boundary (Permit Appx. A, Fig. P-1, AR #596a).[4]

Moreover, the Region included post-operational requirements in the Permit to provide additional protection of the aquifer beyond the PTF area and to USDWs outside the exempted area (Permit Part II.I, AR #596). *See* 40 C.F.R. § 144.52(a)(9). Once PTF injection activities are complete, the Permit requires aquifer rinsing and restoration to aquifer quality limits, which are the higher of either water quality standards or primary maximum contaminant levels (MCLs) or

[4] Downgradient monitoring wells for compliance assurance designated by ADEQ in accordance with Arizona Revised Statute §49-244l requirements for POC wells are found in the Permit Part II.F.1 (AR #596).

pre-operational background concentration levels of all constituents, followed by a minimum of five years of post-rinsing monitoring.[5] Permit Part II.F.2(d) has aquifer quality limits for process-related organics and other constituents (AR #596). There are MCLs for the specific organics listed in Table 2 in the Permit Part II.F.2(d) (AR #596). In addition, the Permit requires "[a]ny organic compound not listed above shall be so listed if an MCL has been established for that organic compound and if the organic compound is detected in the injectate" (Permit Part II.F.2(d) at n.4, AR #596, *see also* II.F.7.a and b). Table 3.1 in Appendix E of the Permit presents the estimated composition of PTF process solutions (AR #596e). After rinsing of the PTF area, the groundwater constituents must not exceed primary MCLs or pre-operational background levels, including all organic compounds. PTF rinsing must continue until those standards are met. Post-rinsing monitoring of the aquifer is also designed to detect migration of any residual contaminants that result from rebound effects (i.e., an increase in concentrations from restored levels) (*See* Permit Part II.H.2, I.2, AR #596). These Permit conditions were carefully crafted to meet regulatory requirements under 40 C.F.R. Parts 144 and 146 and to protect USDWs outside the exempted area. *See* 40 C.F.R. §§146.10, §§§ 144.51(o), 144.55(b)(4), 144.52(a)(9). The Petitioner has not pointed to any erroneous findings of fact or conclusions of law in the record regarding the conditions for injection fluids in the Permit. Therefore, the Board should deny review on these grounds.

To the extent Petitioner suggests that a different standard should be used to limit the type of injected fluids in the Permit, [t]he Board has previously rejected petitions for review based on the suggestion that Regions must require additional limitations on injected fluids beyond the requirements of UIC regulations. In the Order Denying Review of several UIC permits, the Board observed, "[a]lthough Petitioners suggest that injection fluids should be analyzed for all contaminants for which MCLs have been promulgated, such analyses are not expressly required by the text of the regulations. We decline to establish such a requirement by interpretation." *In re NE Hub Partners LP,* 7 E.A.D. 561, 581-2 (EAB 1998). The Board further noted, "[r]ather, it is within the permitting authority's discretion to require analyses that are appropriate in light of the particulars of the activity for which a permit has been requested. *Id.* The Board's finding is consistent with the discretion afforded to the Region in the regulations. Further, in the preamble to revisions to the requirements for Class III well monitoring requirements, EPA clarified that:

> [t]he Agency did not intend to refer to any formally defined set of substances and instead of requiring information on the "toxicity" of injected or formation fluids…the Director is now to consider the "nature" of injected or formation fluids in imposing specific permit requirements. The amount of information required of the applicant to describe the nature of the fluids adequately will vary under particular circumstances and is left to the discretion of the Director.

[5] *Maximum contaminant level* means the maximum permissible level of a contaminant in water which is delivered to any user of a public water system. 40 C.F.R. § 141.2.

46 Fed. Reg. 43156, 43158 (Aug. 27, 1981). [6]

As in *NE Hub*, Petitioner has suggested that the Region's permitting of certain constituents in the injection fluids in the Permit is in clear error, despite its consistency with the particular requirements of Class III wells under UIC regulations at 40 C.F.R. § 146.34 and the discretion afforded the Region to consider appropriate conditions in each permitting decision. As described above, the Region required FCI to submit information about the anticipated constituents of the injection fluids, including organic compounds to be used in the SX/EW process, which are subject to approval by the Region before injection is allowed under the Permit (*See* Permit Part.III. E.6.f, AR #596). These conditions are consistent with UIC regulations, supported by the record, and were carefully designed by the Region to protect the aquifer outside the PTF wellfield and the USDWs outside the exempted aquifer. Therefore, the Petitioner has not established clear error warranting review by the Board.

ii. *The Region Adequately Responded to Comments Raised By Petitioner Related to Concerns About the Injected Fluids*

The Petitioner asserts that the "[b]y relying on [the aquifer] exemption, the Region assured that the volume of subsurface exempted for this mining activity includes and is hydraulically connected to…aquifers that are relied upon for drinking water uses" and further that "[p]ermitting of injection of . . . unspecified, organic chemicals risks causing long-term effects on the aquifer." Petition at 7. The Petitioner claims that "[t]he Region did not respond to this concern, which the Community clearly raised in its comments." *Id.* This assertion is without merit, as the Region responded specifically to the concerns about reliance on the existing Aquifer Exemption and possible drinking water sources in the record:

> With EPA's issuance of the PTF permit, the Agency is not obligated to reexamine the basis for the original aquifer exemption. However, out of an abundance of caution, EPA elected to review whether the portion of the existing exempted aquifer that would be impacted by the PTF operations continues to meet the aquifer exemption regulatory criteria in 40 CFR§146.4(a) and (b)(1). The PTF operations will be conducted entirely within the existing exempted area…For review of the exemption criterion in 40 CFR §146.4(a), EPA considers whether groundwater areas proposed for exemption currently serve as a source of drinking water. EPA considers "current sources" to include water that is currently withdrawn for drinking water purposes as well as water that will be withdrawn in the future by wells that are currently in use. For the PTF, EPA reviewed whether the groundwater within the AOR is currently being withdrawn for drinking water and if such ground water will be withdrawn in the future by drinking water wells currently in existence. EPA confirmed that there are no drinking water wells withdrawing water from the identified portion of the aquifer today, which is consistent with the exemption status of that aquifer.

[6] In the EPA regulations, "Director" refers to the delegated permitting authority, which here is the director of Region 9's Water Division. *See* 40 C.F.R. § 146.3, (AR #586, #587).

(RTC at 15; AR #581). Petitioner's statement regarding aquifers "relied upon for drinking water uses" is not fully explained or supported by citation to data or material demonstrating how aquifers currently in use for drinking water are impacted by the PTF activity. The subsurface area impacted by the Permit is not a USDW as it was exempted under 40 C.F.R. § 146.4 in 1997. *See* 40 C.F.R. § 144.3 (USDW defined as "an aquifer or its portion…which is not an exempted aquifer). The existing Aquifer Exemption from 1997, which was not challenged and remains in place today, was based on the Region's determination that the area exempted did not serve as a current source of drinking water and would not be a future source of drinking water due to the presence of commercially producible quantities of copper (AR #24, #238). In the Response to Comments for the Permit, the Region explained,

> For the PTF, EPA reviewed whether the groundwater within the Area of Review is currently being withdrawn for drinking water and if such ground water will be withdrawn in the future by drinking water wells currently in existence. The Region confirmed that there are no drinking water wells withdrawing water from the identified portion of the aquifer today, which is consistent with the exemption status of that aquifer.

(RTC at 15, AR #581). This analysis was based on groundwater modeling of flow gradients in the subsurface and consideration of the nearest active and inactive drinking water wells located approximately two to three miles from the PTF (SOB at 13-14, AR #18). Contrary to the Petitioner's suggestion, the Region did respond directly to this issue in the record, and did not "fail to bring its experience and expertise to bear on a critical technical issue." Petition at 8. Petitioner has failed to explain why the Region's response in the well-documented record was clearly erroneous. Therefore, the Board should deny review on these grounds.

In addition to specific limitations on injected fluids in the Permit, the Region considered and responded to comments on the possible risks to USDWs from fluids injected during the PTF operation and as discussed further in Section IV.B, added monitoring requirements to respond to these concerns (RTC at 2-4, AR # 581). The Region's response included details of how the Permit conditions will protect USDWs:

> Injected fluids will be contained within the oxide bedrock zone and approximately the lower 55 feet of the 200-vertical foot exempted portion of the LBFU, even in modeled worst-case scenarios (i.e., loss of hydraulic control for 30 days). Based on a 48-hour loss of hydraulic control, which is the maximum time that a loss of hydraulic control would occur under permit conditions, vertical excursions are expected to result in no significant migration of injected solution into the LBFU. Background concentrations for water quality parameters in the permit will be determined for PTF wells and supplemental monitoring wells before injection begins. These data will establish aquifer restoration standards for the PTF wells and water quality standards at the POC and supplemental monitoring wells. During aquifer restoration operations, the permit requires that the oxide zone and the potentially impacted portion of the LBFU be restored to original baseline water quality, or to federal MCLs if greater than baseline concentrations. Groundwater

> quality monitoring will ensure that aquifer restoration standards are met within the PTF well field and continue for five years or more after restoration is achieved.

(RTC at 19, AR #581). Despite this, Petitioner argues that the Region has not met its obligations under 40 C.F.R. § 124.17(a)(2) to respond to its comments challenging "…the Permit's reliance on SX/EW to remove copper from extracted solutions over the exempted aquifer" and "…permitting of injection of…unspecific organic chemicals causing long term effects to the aquifer." Petition at 7.

However, as detailed in Section III and in 40 C.F.R. § 124.17(a), the Region is only required to "[b]riefly describe and respond to all significant comments." 40 C.F.R. § 124.17 (a)(2). Consistent with the EPA regulations, the Board has held that, "… the permit issuer is not required to address each and every point made in comments. It is only required to address all significant comments." *In re City of Attleboro,* 14 E.A.D. 398, 420 (EAB 2009), *E.g., In re Indeck-Elwood, LLC,* 13 E.A.D. 126, 167 n.80 (EAB 2006); *NE Hub,* 7 E.A.D. at 583. The comment cited by the Petitioner in support of this claim is three lines from a 14-page report generated by a groundwater consultant hired by Petitioner, in a section entitled "General Risks to the Community and its Neighbors." While it is not entirely clear what aspect of the comment is cited by Petitioner, on the page cited, the consultant refers briefly to the "well-established technique called solvent extraction/electrowinning ("SW/EW") and concludes that under the draft permit, "organic compounds…will not be completely removed in the recycling treatment train…and would be allow to be sent to the injection wells" and notes "[t]his is not acceptable to the Community." (GRIC Comments, Attachment A at 6, AR #573). As the Region made clear in the record and in accordance with 40 C.F.R. § 146.34, the characteristics of the injection fluids, including organic compounds anticipated to be present, were carefully considered by the Region and influenced the operational and monitoring requirements in the Permit. Injection of these fluids is consistent with permitting requirements for Class III wells that inject into an exempted aquifer per 40 C.F.R. § 144.12 and § 146.34. The comment does not point to any inconsistencies between the draft permit and UIC regulations, and does not provide additional technical information for consideration by the Region. Therefore, the Region's response to the issues raised by Petitioner regarding effects to the aquifer was adequate and the comment does not rise to the threshold level of significance requiring a specific response by the Region.

However, the Region did provide extensive responses to Petitioner's other comments, including concerns raised regarding monitoring requirements, as discussed further in the section below. In addition, the Region provided responses to issues raised by other commenters regarding specific conditions of the injected fluids and clarified the concentration of the acid solution used in the PTF operation and how the movement of the fluids are tracked in the subsurface through monitoring wells (RTC at 23, AR #18). However, the Petitioner has not clearly set forth legal and factual support for its conclusions, or otherwise pointed to any clear error or exercise of discretion that merits Board review.

B. The Permit's Monitoring Requirements Are Consistent with Regulatory Requirements, Supported by Evidence in the Record and Not Clearly Erroneous, and the Region Adequately Responded to Comments from Petitioner on This Topic

The EPA UIC regulations for Class III wells provide that permits must specify monitoring of: the nature of injected fluids with sufficient frequency to yield representative data on its characteristics, injection pressure and volume, the fluid level in the injection zone, and the parameters chosen to measure water quality. 40 C.F.R. § 146.33(b). The regulations do not outline specific technologies, applications, or placement of monitoring wells. The record is clear that the Region thoroughly reviewed and evaluated FCI's proposed monitoring program, and indeed required FCI to add monitoring wells prior to accepting the Testing and Monitoring Plan submitted in the application (AR #310, #312). Information in the record shows that the monitoring wells will demonstrate that the injected fluid is safely confined in the target mining zone and will provide the ability to detect any deviations from the predicted PTF operations such that the operator will be able to "recognize and react to a loss of hydraulic control." Petition at 10. The Region's decision to issue the Permit was rationally based on all the information available during nearly five-year review process, consistent with UIC regulations and took into consideration additional information provided during the public comment process.

i. *Permit Contain Extensive Monitoring Requirements and Are Consistent with UIC Regulations*

Petitioner asserts that "[t]he Region erroneously concluded that quarterly monitoring of groundwater impacts is insufficient, without a showing that operational parameters will ensure containment to prevent contaminants from reaching drinking water." Petition at 2, 8. To obtain review, the Petitioner must identify the contested permit condition and bears the burden of showing that 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 Environmental Appeals Board should, in its discretion, review." 40 C.F.R. § 124.19(a)(i). Here, Petitioner fails to cite to Permit conditions specifically to clarify its vague claim and misrepresents the Permit's monitoring requirements, which include more than quarterly monitoring.

The Permit contains stringent requirements for FCI to establish and maintain hydraulic control within the wellfield, in addition to imposing several levels of monitoring requirements, all of which meet the requirements for monitoring in 40 C.F.R. § 146.33. The Permit's hydraulic control provisions – which include maintaining an extraction to injection ratio of 110% on a daily average basis, establishing an inward pressure gradient, and taking timely corrective actions if there are any signs of a potential loss of hydraulic control – are the principal mechanism to ensure that contaminants do not migrate outside the wellfield area, let alone beyond the exempt aquifer to USDWs (Permit Part II.E.1, H.1, AR #596). In addition, the Permit

requires monitoring to be conducted quarterly for water quality parameters to detect any potential escape of contaminants from the wellfield (Permit Part II.F, H, AR #596). This is a sufficient frequency at the supplemental monitoring wells to detect any potential excursion based on modeling sulfate migration from the wellfield, and the Petitioner does not point to specific reasons why this monitoring regime is not in accordance with UIC regulations.

In addition, modeling indicates that slow moving sulfate migration into the bedrock oxide will take five years to reach the outer supplemental monitoring wells (*See* Permit Appendix A, Figure 11-1, AR #596). Moreover, supplemental monitoring wells will not be the primary indicator of a potential loss of hydraulic control. Monitoring at the perimeter of the wellfield will occur on a *daily and weekly basis* and will detect any loss of hydraulic control, allowing for corrective action before contaminants escape the perimeter of the wellfield (Permit Part II.F.5-6, AR #596). Petitioner fails to acknowledge the Permit's requirements for establishing and maintaining hydraulic control and multiple levels of protective monitoring.

Further, the record demonstrates that the operational constraints are protective of USDWs and Petitioner does not point to any specific permit condition that is inconsistent with UIC regulations. Instead, Petitioner tries to substitute its preferred "combined monitoring and groundwater flow simulation approach" for the Region's technical groundwater modeling analysis without explaining why the Region's extensive response to comments regarding groundwater flow models is not adequately responsive to its comments. Petition at 11-12. As described in the Response to Comments:

> EPA considers the ground water modeling an acceptable simulation and prediction of aquifer flow conditions, and appropriate for the geologic conditions observed and hydraulic properties measured at the FCI property. EPA required FCI to model seven different scenarios with input parameter values provided by EPA based on actual hydrogeologic conditions at the site. This includes a major fault zone that intersects the oxide bedrock zone, which provides a potential preferential lateral and vertical flow path within the model. The permit requires formation testing prior to injection to evaluate subsurface characteristics within the PTF AOR, and the model parameters will be revised if the resulting test results show parameters significantly different from those used in the model.

(RTC at 39-40, AR #581). The Permit requires continuous monitoring of operational parameters and daily monitoring of hydraulic control parameters in observation and recovery wells in addition to quarterly monitoring of certain groundwater quality parameters at the POC and supplemental monitoring wells (Permit Part II.F.4-6, F.10.a, AR #596). Conductivity sensors in observation and recovery wells will provide indications of water quality data in the wellfield on a continuous and daily basis (Permit Part II.C.6.d, F.6, AR #596). The permit requires that the Permittee verify that post-closure conditions are consistent with model predictions (Permit Part II.I.2, AR #596).

The record shows that after consideration of the Permit conditions, the Region was unconvinced that the more frequent groundwater flow simulations recommended by the commenter were necessary, as the daily monitored data provide the necessary information to maintain hydraulic control of ISCR fluids and provide effective indication to the operator of any loss of hydraulic loss that may require operational adjustments. While the Petitioner may prefer another methodology to the one in the Permit, the Board is clear that, "[o]n matters that are fundamentally technical or scientific in nature, the Board will typically defer to a permit issuer's technical expertise and experience, as long as the permit issuer adequately explains its rationale and supports its reasoning in the administrative record." *In re City of Palmdale*, 15 E.A.D. at 705. Instead of engaging with the Region's reasoned response on the technical issues raised in the comments, the Petitioner instead makes a vague assertion about the "inadequate response and inadequate approach to protecting the aquifer." Petition at 12. The Region carefully considered groundwater monitoring and flow when it concluded in the final Permit that the monitoring requirements were adequate and protective. This conclusion is supported by the record and within the Region's technical expertise, and because Petitioner has failed to identify why the Region's reasoned response was not adequate, the Board should deny review of the Permit on this basis.

Petitioner asserts that the Board should require more stringent operational and monitoring parameters because its views the PTF operations as an "complex and unproven technology." Petition at 9. This assertion is also at odds with information provided by the Region, as explained in the Statement of Basis and Response to Comments. In fact, the technology was tested successfully in the nearby BHP pilot test facility and the results of that test informed FCI in the design and operation of the proposed PTF project (RTC at 6-14, AR #596). The BHP pilot test has demonstrated protection of USDWs for the past 19 years since ISCR operations ceased and 12 years since rinsing operations were halted. Monitoring data at the POC wells have not detected exceedances of baseline aquifer quality limits related to the BHP test operations, indicating that restoration efforts met the prior permit requirements (RTC p. 29-33, AR #581). In addition, the Region carefully considered information from the BHP operations and comments regarding the technology, and concluded in the record that the permitted activity would be protective of USDWs and in compliance with UIC regulations.

Petitioner suggests that despite the extensive operational and monitoring requirements in the Permit, the Region must consider factors outside the UIC regulations, such as the Permittee's "demonstrated experience in the permitted activity" or "specific capacity of an ISCR [] operator to handle this type of precision monitoring… and response necessary to prevent environmental harm" in determining whether to issue the permit. Petition at 9,11. Petitioner does not explain why the monitoring requirements in the Permit do not meet the regulatory requirements in 40 C.F.R. § 146.33 or are clearly erroneous. In fact, the Board has denied petitions for review that rely on these grounds. When petitioners raised evidence of past violations of environmental law by a permit applicant's sister company, the Board was clear that such information was not

relevant to the Region's permit decision. In dismissing the petition for review in the matter of *In re Envotec*, the Board found that "[t]he compliance records of Envotech's sister companies are not, in and of themselves, relevant to the Region's decision to grant the Class I UIC permits to Envotech L.P. Further, the Board has no jurisdictional basis to review a permit based solely on a company's past compliance history." *In re Envotech, L.P*, 6 E.A.D. 260, 273 (EPA 1996). The Board further explained, quoting prior precedent, that "[t]o deny a permit because of past practices, it would be necessary for the petitioners to show that, no matter what conditions or terms are put into the permit, compliance with the permit cannot ensure protection of USDWs." *Id.* at 274, *Cf In re Marine Shale Processors*, 5 E.A.D. 751, 796 n.64 (EAB 1995). The FCI Permit contains protective conditions to prevent migration to USDWs that are enforceable by the EPA once the Permit is finalized, providing an additional safeguard should there be future compliance problems. Petitioner has failed to show that FCI is incapable of compliance of the permit conditions, nor has it presented evidence that specifically demonstrates that the conditions of the permit are not protective of USDWs or cause "environmental harm," as asserted.

ii. The Region Adequately Responded to Comments from Petitioner Related to the Adequacy of the Monitoring and Hydraulic Control Permit Requirements

Without pointing to specific permit conditions of concern, the Petitioner claims that the Region did not consider comments regarding the ability of FCI to detect and respond to loss of hydraulic control during operations of the PTF. Petition at 10. This is incorrect. The Region directly discussed these issues in the Response to Comments (RTC at 8, 10-11, 20-22, AR #581). Specifically, the Region noted:

> The commenter does not acknowledge that the PTF UIC permit requires electrical conductivity monitoring in observation wells to monitor and ensure hydraulic containment of ISCR fluids, in addition to monitoring differential water levels and excess extraction to manage and control containment of ISCR fluids. As described in the above Response to Comment 6, EPA added bulk electrical conductivity monitoring and clarifications for observation well monitoring through the ore body and LBFU interface. EPA believes that continuous monitoring and daily management of injection and extraction rates at individual wells will be sufficient to maintain hydraulic control and to restore it if there is a temporary loss of hydraulic control. Excess extraction rates are expected to be sufficient to overcome the low velocity of the groundwater flow to the northwest and prevent the escape of ISCR fluids between extraction wells. In addition to this wellfield monitoring, the supplemental monitoring wells will be placed within the AOR perimeter and above the exempted zone in the LBFU and UBFU to ensure that any excursions are detected and reversed before escaping the AOR or into a nonexempt zone above the exclusion zone. Moreover, the natural vertical gradient between the LBFU and the bedrock zone is downward, which should increase net flow into the bedrock zone during PTF recovery and rinsing operations and sustain flow into the bedrock zone during the post-closure period.

(RTC at 22, AR #581).

As described above, and in response to comments regarding concern over potential loss of hydraulic control and the time for such a loss to be detected and rectified, the Region modified the requirements in the final Permit for monitoring at the observation wells to require daily electrical conductivity measurements compared to baseline values, specified as a statistical increase in bulk conductivity values above noise levels at the perimeter of the wellfield to ensure effective monitoring laterally across the Bedrock Oxide Zone (RTC at 2-3, AR #581). The Region also added similar electrical conductivity measurement requirements for the LBFU/Oxide interface on a weekly basis to ensure effective monitoring vertically at the perimeter of the wellfield (RTC at 2-3, 10-11, 22, AR #581; Permit Part II.E.1.c, Part II.F.5, 6.b, AR #596). Petitioner appears to restate its comments from the public comment period regarding monitoring wells without acknowledging the Region's substantive response to its comments or the changes to the Permit made as a result of Petitioner's comments. As discussed in Section III, the Board requires petitioners to do more than reiterate its comments; they must demonstrate why the permit issuer's response is inadequate. The Petitioner has not explained why the Region's response, including the resulting changes to the final Permit to increase monitoring conditions, was clearly erroneous or otherwise warrants review as required by 40 C.F.R. § 124.19(a)(4)(ii).

Petitioner also takes issue with the Region's response to comments regarding other in-situ recovery operations and their relevance to the proposed PTF operations. Petition at 11. In its comments, Petitioner claimed that FCI had not demonstrated the ability to detect and react to the possible loss of hydraulic control because FCI did not demonstrate in its application that other ISCR operations had maintained hydraulic control (RTC at 45, AR #581). Petitioner did not cite to or provide any specific technical reports or data to support its assertion. The Region's response detailed why, in the Region's technical judgment, the Santa Cruz ISCR test referenced by Petitioner was not relevant to the PTF operation due to the very small size of the operation, and the insufficient number and placement of monitoring wells. *Id.* The Region further responded to the Petitioner's reference to the BHP ISCR operation conducted at the FCI property and detailed why the temporary loss of hydraulic control in that operation was demonstrated to be properly managed within the BHP permit conditions (*Id., see also* RTC at 8-10, AR #581). The record shows the Region carefully considered and responded to the Petitioner's comment and in designing permit conditions. Therefore, the Petitioner's assertion that the Region did not "respond to the specific concerns of commenters instead of generally claiming that a concern was addressed" is contrary to the evidence in the record and without merit. Again, the Board has previously held that petitioners must do to do more than reiterate comments previously submitted to the Region, and denies petitions that fail to engage with the substance of the Region's responses to comments in the record. As a result, the Board should deny review on this basis.

IV. CONCLUSION

In issuing the FCI Permit, the Region reviewed the application and developed permit terms consistent with regulatory standards. The Region carefully considered the significant comments submitted by the Petitioner and provided substantive responses in the record. The Region has engaged extensively with the Petitioner in government-to-government consultation regarding the proposed operation, the protection of ground water resources, and concerning the potential impacts to historic properties under the NHPA. In several instances, the Region has incorporated changes to the Permit in response to the Petitioner's concerns expressed during these consultations and the public comment process (*See* RTC at 1-3, AR #581, #214, #215,). Contrary to the Petitioner's position, the record shows that the Permit is protective of USDWs, in accordance with UIC regulations, and has a strong and well-developed technical basis. The record establishes that the Petitioner has not identified any clearly erroneous decisions by the Region or any policy decisions deserving of review by this Board. The Region therefore respectfully requests that the Petition for Review be denied.

V. STATEMENT CONCERNING ORAL ARGUMENT

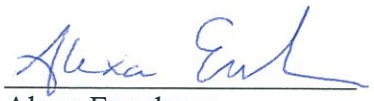
The EAB may hold oral argument on its own initiative or in response to a request from one or more parties. 40 C.F.R. § 124.19(h). To request oral argument, a party must include in its substantive brief a statement explaining why oral argument should occur. *Id.* Petitioner requested "[t]he opportunity to present oral argument in this proceeding… to assist the EAB in resolving the issues in dispute." Petition at 12. As explained in detail above, Petitioner has not satisfied its substantial threshold burden to demonstrate that the issues identified in its Petition require review by this Board. None of Petitioner's contentions prove any clearly erroneous finding of fact or conclusion of law, or of showing any exercise of discretion or important policy consideration requiring review. Also, Petitioner has not provided a substantive explanation of why oral argument should occur. The issues presented are not issues of first impression for the Board or of a nature or complexity such that oral argument would materially assist in their resolution. Therefore, oral argument is not necessary or appropriate.

VI. STATEMENT OF COMPLIANCE WITH WORD COUNT

Pursuant to 40 C.F.R § 124.19(d)(3), the Region states that this Response to the Petition for Review contains approximately 9,544 words, which does not exceed the 14,000-word limit set by the EAB.

Date: April 7, 2017

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that I caused a copy of the attached **RESPONSE TO PETITION FOR REVIEW** to be served by electronic mail upon the persons listed below.

Date: April 7, 2017

Respectfully submitted,

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