IN RE AMERICAN SODA, LLP

UIC Appeal Nos. 00-1 & 00-2

ORDER DENYING REVIEW

Decided June 30, 2000

Syllabus

On February 9, 2000, EPA Region VIII ("the Region") issued a Class III Under-ground Injection Control ("UIC") area permit to American Soda, LLP ("American Soda"), pursuant to §§ 1421(b) and 1422(c) of the Safe Drinking Water Act ("SDWA"), 42 U.S.C. §§ 300h(b) and 300h-1(c). The permit authorizes American Soda to construct and operate solution mining wells on its Yankee Gulch Joint Venture sodium leases in Rio Blanco County, Colorado. Prior to receiving approval to commence commercial operations, the permit requires American Soda to submit for EPA review additional groundwater data. After the groundwater at the site is further characterized, American Soda will use the wells to mine for the mineral nahcolite, utilizing a solution mining process.

Three petitioners, the Sierra Club, IMC Chemicals, Inc. ("IMC"), and Tom Dodson and Associates ("Dodson"), have challenged the Region’s permitting decision. The petitions raise the following allegations as grounds for review of the Region’s permitting decision: failures in the Department of Interior’s Bureau of Land Management’s ("BLM") National Environmental Policy Act ("NEPA") process; EPA’s failure to prepare its own Environmental Impact Statement ("EIS") under NEPA; the Region’s improper consideration of applicant’s groundwater data in issuing the permit; improper inclusion of a hydrology report submitted after the public comment period closed; and the Region’s failure to require a complete hazardous waste determination before issuing the permit. In the Region’s response to petitioners’ briefs, the Region challenged the appeal of IMC and Dodson as untimely. Further, the Region argued that IMC lacked standing to file an appeal in this matter.

Held: The Board concludes that all petitions for review were timely filed. The Board finds that IMC lacks standing to challenge some of the issues it raised on appeal. Additionally, the Board finds that all challenges regarding BLM’s process are beyond the scope of Board review. With respect to the remaining issues for review, the Board concludes as follows: 1) under the plain language of the regulations governing the issuance of the permit, the Region was not required to prepare an EIS in support of the permit; 2) the Region’s consideration of applicant’s groundwater data in issuing the permit does not amount to clear error where the permit protects all aquifers, not only USDWs, where the permit provides for additional groundwater sampling and analysis prior to initiation of mining activities, and where the Region has adequately explained its rationale and addressed comments; 3) the Region did not err in considering material received after the close of the public comment period and including the material in the administrative record; and 4) the governing regulations do not require the Region to fully characterize the hazardous nature of all sources of injection fluid prior to permit issuance. Accordingly, the Board rules that
petitioners have not met the standards necessary to invoke the Board’s review of the Region’s decision, and thus denies review.

**Before Environmental Appeals Judges Scott C. Fulton, Ronald L. McCallum and Kathie A. Stein.**

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

**I. INTRODUCTION**

The Environmental Appeals Board (“EAB” or “Board”) has received two petitions seeking review of the United States Environmental Protection Agency (“EPA”) Region VIII’s (“the Region”) decision to grant American Soda, Limited Liability Partnership (“American Soda”) a Class III Underground Injection Control (“UIC”) permit. The petitioners in this matter are the Sierra Club (UIC Appeal No. 00-1) and IMC Chemicals Inc. (“IMC”), together with Tom Dodson and Associates (“Dodson”) (UIC Appeal No. 00-2). The Board has consolidated these appeals for decision. The Region issued the Permit pursuant to §§ 1421(b) and 1422(c) of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. §§ 300h(b) and 300h-1(c), on February 9, 2000 and served notice of its decision, along with its response to comments, on February 10, 2000. See Region VIII’s Response to Petitions for Review (“Region’s Brief”) at 4-5. The Permit authorizes American Soda to construct and operate wells for a new solution mining operation located in the Piceance Creek Basin in northwestern Colorado.

The EAB has carefully considered the arguments raised in the petitions for review, the responses of the Region and American Soda to the petitions, and the relevant portions of the administrative record underlying the Region’s decision to grant the Permit. For the reasons discussed below, the Board concludes that the petitioners have not satisfied the applicable standards essential to invoke the Board’s review of the Region’s decision.

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1 Under 40 C.F.R. § 144.6, injection wells fall into five classes depending on the material being disposed in the well. Class I wells are used to inject hazardous waste beneath the lowermost formation containing an Underground Source of Drinking Water (“USDW”) within one quarter mile of the well. Class II wells are used to inject fluids in connection with natural gas storage operations, conventional oil or natural gas production, oil or natural gas recovery, and storage of hydrocarbons. Class III wells are used to inject fluids for extraction of minerals. Class IV wells are used to dispose of hazardous waste or of radioactive waste into a formation which contains a USDW within a quarter mile of the well. Class V wells are injection wells that are not included in Classes I, II, III, or IV. In this case, American Soda applied for a permit to extract minerals such as salts or potash. This type of well requires a Class III permit. 40 C.F.R. § 144.6(c).
II. BACKGROUND

A. Regulatory Background

In August of 1998, American Soda submitted its commercial mining plan to the Department of Interior’s Bureau of Land Management ("BLM"). American Soda holds rights to mine sodium under federal sodium leases which are supervised and administered by BLM pursuant to the Mineral Leasing Act of 1920, 30 U.S.C. §§ 181 et seq. The leases include 4,954 acres of federal land in the plateau country of northwest Colorado called the Piceance Basin.

With the submission of its commercial mining plan, American Soda requested BLM’s approval to recover and process the sodium mineral, nahcolite, also known as natural baking soda, by solution mining. The solution mining process involves injecting hot water, under pressure, into the sodium-bearing formation, and extracting the sodium brine that results. Under American Soda’s plan, the extracted sodium brine will initially be treated at the mine site, and then American Soda will pipe the brine solution to a processing plant in Parachute, Colorado. The plant is located 44 miles from the mine site.

In response to American Soda’s commercial mining plan, BLM began its "scoping process" pursuant to § 102 of the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4332. BLM released its environmental impact statement ("EIS") on the commercial mining plan in draft form in January 1999 (64 Fed. Reg. 1,819 and 2,639 (Jan. 12 and Jan. 15, 1999)) and in final form in July 1999 (64 Fed. Reg. 38,422 and 39,989 (July 16 and July 23, 1999)). On October 26, 2000, BLM issued its Record of Decision ("ROD") pursuant to NEPA approving American Soda’s commercial mining plan (64 Fed. Reg. 57,648 (Oct. 26, 2000)). Pursuant to the ROD, American Soda must secure the appropriate UIC permit from EPA prior to start up of the operation.

In conjunction with filing its commercial mining plan with BLM, American Soda also submitted its UIC permit application to EPA, Region VIII. American Soda’s application requested a new source permit pursuant to § 1422(c) of the SDWA, as amended, 42 U.S.C. § 300h-1(c), and EPA’s corresponding regulations, codified at 40 C.F.R. parts 124, 144, 146, and 147, for the construction and operation of multiple wells for the solution mining operation. The area described in American Soda’s UIC permit application is located on the 1,030 acre Piceance Site, in BLM’s White River Resource Area, on the Yankee Gulch Joint Venture Leases.

Region VIII received American Soda’s application in August of 1998, and determined the application was complete in September of 1998. Region VIII issued a draft permit and statement of basis for public comment on May 13, 1999. See Yankee Gulch Sodium Lease Permit Index to the Administrative Record (Ad-
On July 13, 1999, Region VIII held a public hearing on the draft permit. During the hearing, Region VIII accepted oral comments and extended the public comment period through August 13, 1999. After comments questioning the applicant’s groundwater data, American Soda retained Dr. Saulnier, a groundwater hydrologist who is familiar with the area, to prepare a report on groundwater in the Piceance Creek Basin. EPA received Dr. Saulnier’s report on September 10, 1999, and included the report at that time in the administrative record.2

Region VIII issued the “Final Area Permit, Class III Solution Mining Wells Yankee Gulch Project, EPA Area Permit No. CO3858-00000” (“Permit”) on February 9, 2000. The Region also released its Addendum to the Statement of Basis and Response to Comments dated February 10, 2000 (Response to Comments) in which the Region addressed both written and oral comments it had received during the public comment period.

B. Geological Background

The Region describes the geology of the area at issue as being two distinct zones. The upper zone starts at the ground surface and extends to a depth of approximately 1400 feet. Region’s Brief at 5. This upper zone contains three aquifers.3\textsuperscript{Id.} The upper most aquifer is called the Alluvial Aquifer. \textit{Id}. Below the Alluvial Aquifer is the Upper Aquifer. It extends from approximately 440 to 845 feet. \textit{Id}. The Upper Aquifer contains a formation called the Uinta Formation. \textit{Id}. Below the Upper Aquifer is the Mahogany Zone, which is a 180 foot thick layer of impermeable, but fractured oil shale. \textit{Id}. This zone separates the Upper and Lower Aquifers. The Lower Aquifer begins at approximately 1025 feet below the surface and extends another 380 feet until it reaches the Dissolution Surface. The Dissolution Surface is the lowest point where groundwater exists. \textit{Id}. at 6.

The second zone is called the Saline Zone. This zone contains no groundwater and consists of an oil shale, marlstone, nahcolite, halitz and dawsonite matrix that is impermeable. \textit{Id}. The Saline Zone begins approximately 1400 feet below the surface and is approximately 780 feet thick. \textit{Id}.  

\textsuperscript{2} For a more detailed description of the Saulnier Report, see \textit{infra} Note 21.

\textsuperscript{3} An aquifer is “a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.” 40 C.F.R. § 146.3.
C. Permitting Background

Under its area permit, American Soda will mine nahcolite from the Saline Zone by injecting a heated mining fluid into UIC regulated Class III injection wells. Subject to several conditions, the Permit allows American Soda to begin construction of 25 initial wells located within an area smaller than the entire lease on which American Soda eventually hopes to mine. Approximately 13-15 new wells may be developed each year after the initial start-up period. Active production is expected to last thirty years. Region’s Brief at 7.

The solution mining process dissolves the nahcolite in the mining fluid and pumps the dissolved nahcolite out for processing. The Permit contains several conditions on construction, testing, operating and monitoring the wells. Such as, the Permit requires that the top of all cavities created from the mining process be 150 feet below the bottom of the Dissolution Surface. Additionally, prior to initiation of the commercial solution mining operation, the Permit requires American Soda to collect water quality data from 25 sampling points on a quarter-annual basis, for at least five quarters, before American Soda can begin to use any of the initial 25 wells for commercial mining. Under the Permit, American Soda may construct the initial wells prior to collecting the five quarters of water quality data. However, the Permit does not allow American Soda to construct additional wells in the initial five year phase of the Permit until it submits the five quarters of monitoring results to EPA for review pursuant to 40 C.F.R. § 144.33. Moreover, the data will undergo review by the Region before commencement of commercial operations. See Response to Comments at p. 13. To ensure the Region has adequate time to review the data, the Permit requires written authorization by the Director prior to start up of operations. See Permit section I.

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4 An area permit is one that authorizes construction and operation of multiple underground injection wells within a particular area, rather than authorizing each well individually. 40 C.F.R. § 144.33 sets forth the requirements for an area permit.

5 The injection fluid will consist primarily of recycled depleted injection fluid from nahcolite production, water softener backwash, and small amounts of “makeup water” from various sources which is used to make up the difference between the other sources of injection fluid listed above and the volume needed for effective injection. Region’s Brief at 7.

6 A discrepancy exists between the Region’s Brief and the Permit regarding the number of initial wells authorized under the Permit. The Brief states 26 initial wells are authorized, whereas the Permit lists 25 initial wells. See Permit at section I. We will use the Permit’s number.

7 The requirement for collection of additional groundwater data is included in the Permit at section II.A.3. and Appendix I, “Groundwater, Surface Water, and Process Monitoring Plan.”
D. The Petitions

We have received two petitions seeking review of the Region's permit decision in this matter. Sierra Club petitioned the Board for review, as did IMC, together with Dodson. The two petitions raise many of the same concerns. Both petitions take issue with BLM's NEPA process and cite various portions of BLM's EIS as inadequate. See Sierra Club's Brief at part IV; IMC and Dodson's Brief at part F. Sierra Club's petition challenges the Region's issuance of the Permit without first preparing an EIS pursuant to NEPA. Sierra Club's Brief at 2-12 and 17-21. Both petitions raise objections to the Region's reliance on groundwater data, which they claim are inadequate and inaccurate. See Sierra Club's Brief at 12-14, 21-23; IMC and Dodson's Brief at 8-14. Moreover, the petitions challenge the Region's use of the Permit's monitoring plan to augment, post-permit issuance, groundwater data that petitioners claim is inadequate to support injection. See IMC and Dodson's Brief at 14-19. The petition submitted by IMC and Dodson also challenges the Region's use of the Saulnier report as improper. See IMC and Dodson's Brief at 19-22. IMC and Dodson further take issue with the Region's conclusion that the injection fluids are not hazardous waste. See IMC and Dodson's Brief at 22.

III. DISCUSSION

A. Statutory and Regulatory Framework

Congress conferred upon EPA the authority to regulate deep well injection in Part C of the SDWA, as amended, 42 U.S.C. §§ 300h through 300h-7. The protections established by the statute are not focused on groundwater per se, but rather on groundwater that is or may be a source of drinking water. Section 1422(c) of the SDWA, thus, requires EPA to issue regulations setting forth "minimum requirements for effective programs to prevent underground injection which endangers drinking water sources," to be implemented by EPA in states that are not yet authorized to administer their own UIC programs. 42 U.S.C. § 300h-1(c). EPA remains the permitting authority under the SDWA for Class III wells in Colorado. 40 C.F.R. § 147.301.

In accordance with Congress' mandate, EPA issued regulations designed to protect underground sources of drinking water ("USDW") from contamination as a result of deep well injection. A USDW is defined as,

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

40 C.F.R. § 144.3.

The rules implementing the UIC program are set forth at 40 C.F.R. parts 124, 144, 146, and 147. The Board has on several occasions stated that "the 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, and in establishing the conditions under which deep well injection is authorized." In re Envotech, L.P., 6 E.A.D. 260, 264 (EAB 1996). See also In re NE Hub Partners, L.P., 7 E.A.D. 561 (EAB 1998), review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA, 185 F.3d 862 (3d Cir. 1999); In re Brine Disposal Well, 4 E.A.D. 736 (EAB 1993) ("It has therefore repeatedly been held that parties objecting to a federally issued UIC permit must base their objections on the criteria set forth in the Safe Drinking Water Act and its implementing regulations"); In re Terra Energy Ltd., 4 E.A.D. 159 (EAB 1992). Therefore, the SDWA and the UIC regulations authorize the Board to review UIC permitting decisions only as they affect a well's compliance with the SDWA and applicable UIC regulations. See Envotech, 6 E.A.D. at 264. When petitioners in other cases have raised concerns outside the scope of the UIC program, the Board has denied review of those petitions. See, e.g., NE Hub Partners, 7 E.A.D. at 567.

The regulations not only define substantive criteria that EPA must use to develop permit conditions, they also establish procedural requirements for challenging a Region's permit decision. Among other things, § 124.19 requires a petitioner to file his or her petition for review with the Board within a 30-day time period, and to demonstrate that the petitioner has standing to challenge the decision. This rule is intended to ensure that the Region has the first opportunity to address any objections to the permit, and that the permit process will have some finality. Envotech, 6 E.A.D. at 266; Brine Disposal Well, 4 E.A.D. at 740; In re Renkiewicz SWD-18, 4 E.A.D. 61, 64 (EAB 1992).

The Board's jurisdictional authority to review UIC permit decisions is outlined at 40 C.F.R. § 124.19. Under this regulation a UIC permit decision will ordinarily not be reviewed unless it is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a). In our prior decisions, the Board has consistently stated that its power of review should be used sparingly and that most permit conditions should be finally determined at the Regional level. See NE HUB Partners, 7 E.A.D. at 567; In re Ash Grove Cement Co., 7 E.A.D. 387 (EAB 1997); Envotech, 6 E.A.D. at 265. The burden of demonstrating that review is warranted rests with the petitioner. NE HUB Partners, 7 E.A.D. at 567 (quoting In re Federated Oil & Gas, 6 E.A.D. 722, 725-26 (EAB 1997));
Envotech, 6 E.A.D. at 265; In re Beckman Production Services, 5 E.A.D. 10, 14 (EAB 1994).

B. Threshold Requirements

1. Timing

In the Region’s reply brief, the Region argues that the appeal by Petitioners IMC and Dodson was not timely filed, and should be denied. The Region contends that the 30-day time period within which appeals are due begins to run with the date of the permit decision, in this case February 9, 2000, not the date of notice, in this instance February 10, 2000. The Region cites 40 C.F.R. § 124.19(a) as its basis for this conclusion. Thus, using February 9, 2000 as the date the 30-day time period began to run in this case, the Region argues that the petitioners’ deadline for appeal to the Board was March 13, 2000. IMC and Dodson filed their Petition for Review and Statement of Reasons with the Board on March 14, 2000.

The regulation that sets the jurisdictional deadline for petitioners to appeal permit decisions states:

Within 30 days after a * * * UIC * * * final permit decision * * * has been issued under § 124.15, any person who filed comments on that draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. * * * The 30 day period within which a person may request review under this section begins with the service of notice of the Regional Administrator’s action unless a later date is specified in that notice.

40 C.F.R. § 124.19(a) (emphasis added). In prior decisions, the Board has stated that the clear unambiguous reading of the regulation, requires the 30-day time period to commence when the Region serves its final permit decision. See In re Envotech, L.P., 6 E.A.D. 260, 265 (EAB 1996); In re Beckman Production Services, 5 E.A.D. 10, 15 (EAB 1994). “When the Region serves a final permit decision by mail, service occurs upon mailing and the date of mailing usually commences the calculation of the 30-day appeal period.” Beckman, 5 E.A.D. at 15 (citing In re Bethlehem Steel Corp., 3 E.A.D. 611 (Adm’r 1991)).

Because, in the instant case, the Region’s notice was dated February 10, 2000, and the Region mailed the notice that same date, the deadline for appeal

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8 The rules allow petitioners an additional three days to respond when notice is served by mail. 40 C.F.R. § 124.20(d).
was 33 days after February 10, 2000, or March 14, 2000. The Board received Petitioners IMC and Dodson’s appeal on March 14, 2000. Therefore, petitioners filed a timely appeal.

2. Standing

The Region’s second jurisdictional challenge questions IMC’s standing to file its petition for review of the permit decision. The Region represents in its response brief that “[The Region] has no record of receiving comments from Petitioner IMC during the public comment period for the UIC permit or at any time prior to receiving its petition for appeal.” Region’s Brief at 12. The Region further states that while Petitioner Dodson — which apparently has some relationship with IMC — did comment on the UIC permit during the public comment period, Dodson never stated it was commenting on behalf of IMC. Region’s Brief at 12. IMC did not respond to the Region’s brief.

In order to have standing to appeal a permit decision, the petitioner must satisfy several threshold conditions. Pursuant to 40 C.F.R. § 124.19(a),

[A] petitioner has ‘standing’ to pursue an appeal of the conditions of a final permit that are identical to the conditions of the draft permit only if the petitioner filed timely comments on the draft permit or participated in the public hearing on the draft permit. * * * A petitioner who failed to file timely comments on a draft permit or participate in the public hearing will only have standing to pursue an appeal to the extent that the conditions in the draft permit are changed in the final permit.


Having reviewed the relevant portions of the administrative record for this matter, the Board can find no documentation that IMC either submitted written comments or participated in the public hearing. Further, Dodson never stated it was commenting on behalf of IMC. Because Petitioner IMC neither participated in the public hearings held on the permit, nor filed written comments regarding the permit, IMC has standing only to raise issues concerning provisions which were changed between the draft and final permits. See 40 C.F.R. § 124.19(a). We will, thus, entertain IMC’s arguments on the following points: 1) the adequacy of the additional groundwater sampling contemplated in the Permit’s “Ground Water, Surface Water, and Process Monitoring Plan”; 2) the Region’s use of the Saulnier report to "shore up the permit"; and 3) the Region’s conclusion that American Soda’s sources of injection fluid are not hazardous waste. In these instances, the Region made changes to the conditions in the draft permit before
issuing the final permit decision. All other issues raised by IMC are dismissed.\textsuperscript{9}

3. Beyond the Scope of the Board’s Review

Both Sierra Club and Dodson take issue with BLM’s NEPA process. Petitioners point to the alleged inadequacies in BLM’s EIS process under NEPA and to BLM’s need to issue a supplemental EIS. Dodson’s Brief at 23-30; Sierra Club’s Brief at 11, 14-16, 18-19, 21, 23.

As discussed above, the UIC permitting process is narrow in its focus. Indeed, the statute and the UIC regulations establish the only criteria a Region may use in deciding whether to issue a UIC permit. See \textit{In re Envotech, L.P.}, 6 E.A.D. 260 (EAB 1996). Thus, “the Board has denied petitions for review of UIC permits when the concerns raised were outside the scope of the UIC program as established by statute and regulation.” \textit{In re NE Hub Partners, L.P.}, 7 E.A.D. 561, 567 (EAB 1998), review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA, 185 F.3d 862 (3d Cir. 1999); See also \textit{In re Federated Oil & Gas of Traverse City, Michigan}, 6 E.A.D. 722 (EAB 1997); \textit{In re Terra Energy Ltd.}, 4 E.A.D. 159 (EAB 1992).

The SDWA and the UIC regulations are designed to protect underground sources of drinking water. See generally SDWA, 42 U.S.C. § 300f to 300j-26; 40 C.F.R. parts 124, 144, 146, and 147. Neither the statute nor the implementing regulations authorize EPA to regulate solution-mining activities apart from their impacts on underground sources of drinking water and neither authorize the Board to review another agency’s authorization of such activities.

To the extent petitioners raise issues regarding alleged deficiencies with BLM’s EIS process under NEPA, this Board must deny review, as review is appropriately left to BLM and its administrative process.\textsuperscript{10} Therefore, review is denied for Petitioner Dodson’s Brief part F (Project’s Impact on Oil Shale Resources)\textsuperscript{11} and Petitioner Sierra Club’s Brief part IV (BLM’s ROD cannot be relied

\textsuperscript{9} Because IMC and Dodson filed jointly, we will nonetheless proceed to discuss all substantive issues raised by their petition, since Dodson does have standing to proceed on all issues raised in this matter.

\textsuperscript{10} Petitioners have in fact used the BLM’s administrative process to appeal these very issues within the BLM appellate hierarchy. See Exhibit 7 of the Region’s Brief.

\textsuperscript{11} This section of Dodson’s Brief attacks BLM’s estimate of the project’s impact on oil shale reserves and also points out that the U.S. Geological Survey’s belated comments on BLM’s EIS suggest that subsidence will be greater than BLM anticipates. Dodson further takes issue with the Agapito Report, a report prepared for American Soda that evaluates solution mining’s impact on oil shale, as BLM’s attempt to “pad the administrative record with favorable analysis of the oil shale issue.” Dodson’s Brief at 23. Throughout this section, BLM’s EIS is criticized as being incomplete.
upon by EPA to Satisfy NEPA).\textsuperscript{12}

C. Substantive Issues

1. EPA’s Obligations Under NEPA

Petitioner Sierra Club challenges the Region’s issuance of the Permit because EPA did not perform an EIS pursuant to § 102 of NEPA for the mining operations. Petitioner Sierra Club argues that because the UIC permitting process is not functionally equivalent to an EIS, an EIS is required for this Permit. Specifically, Sierra Club argues that the UIC permitting process does not address the majority of elements required by an EIS, such as the requirements to consider alternatives to the proposed action, the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. Sierra Club’s Brief at 2-12. Thus, before the Region may issue a UIC permit, Sierra Club contends, Region VIII must prepare an EIS in compliance with NEPA.

In response, Region VIII argues that the UIC permitting process is the functional equivalent of NEPA, citing supportive case law and 40 C.F.R. § 124.9(b)(6), which the Region argues codifies EPA’s determination that UIC permits meet the standards for functional equivalency. Region’s Brief at 14.

By its terms, NEPA requires an EIS for, \textit{inter alia}, “major Federal actions significantly affecting the quality of the human environment * * *.” NEPA § 102(C), 42 U.S.C. § 4332(C). Notwithstanding NEPA’s general application to major federal actions, courts have long recognized that NEPA’s primary goal is to require government to consider the environmental consequences of its decision. 42 U.S.C. § 4332. Accordingly, Courts have developed the doctrine of “functional equivalency” to ensure that NEPA remains consistent with its primary goal and does not add one more regulatory hurdle to the process. \textit{E.g.}, \textit{Portland Cement Ass’n v. Ruckelshaus}, 486 F.2d 375 (D.C. Cir 1973), \textit{cert denied}, 417 U.S. 921 (1974). The functional equivalency test provides that,

where a federal agency is engaged primarily in an examination of environmental questions, and where substantive and procedural standards ensure full and adequate consideration of environmental issues,

\textsuperscript{12} Throughout Petitioner Sierra Club’s Brief, Petitioner criticizes BLM’s NEPA process. Sierra Club’s part IV focuses particularly on BLM and its allegedly deficient process. In part IV, Sierra Club challenges the Saulnier Report (discussed in section III(C)(e), \textit{infra}) because “BLM never gave anyone notice about it.” Sierra Club’s Brief at 14. Additionally, Sierra Club contends that the EIS and the Agapito report come to different conclusions on cavity temperature and rubblization.
then formal compliance with NEPA is not necessary, [and] functional compliance [is] * * * sufficient.


Although the Board has not previously considered the question of functional equivalency in the context of a UIC permit, there is prior administrative case law that has discussed the issue of functional equivalency in related contexts. For instance, in In re Chemical Waste Management, Inc., a case involving a RCRA treatment storage and disposal permit, the Administrator determined that in order to show functional equivalency to NEPA, EPA need not demonstrate that it has addressed all five elements of an EIS as set forth in NEPA, but rather, “NEPA is fulfilled where the federal action has been taken by an agency with recognized environmental expertise and whose procedures ensure extensive consideration of environmental concerns, public participation, and judicial review.” In re Chemical Waste Management, Inc., 2 E.A.D. 575, 578 (Adm’r 1988), aff’d mem. sub nom. State of Alabama ex rel. Siegelman v. EPA, 911 F.2d 499 (Ala 1990). Similarly, in In re IT Corporation, 1 E.A.D. 777 (Adm’r 1983), the Administrator observed, “[T]he courts have recognized that Federal regulatory action taken by an agency with recognized environmental expertise, when circumscribed by extensive procedures, including public participation for evaluation of environmental issues, constitutes the functional equivalent of NEPA’s requirements.” Id. at 778.

Notably, IT Corp. was a case involving an appeal of a Hazardous Waste Management permit, and thus arose under 40 C.F.R. part 124, which establishes procedures for issuing, modifying, revoking and reissuing, or terminating both RCRA and UIC permits. 40 C.F.R. § 124.1. 40 C.F.R. § 124.9(b)(6) states in relevant part:

[A]ll RCRA [and] UIC * * * permits * * * are not subject to the environmental impact statement provisions of § 102(2)(C) of the National Environmental Policy Act, 42 U.S. C. § 4321.

40 C.F.R. § 124.9(b)(6). The Administrator held that 40 C.F.R. § 124.9(b)(6) served to codify the case law on NEPA functional equivalence and accordingly found that the RCRA permitting program was the functional equivalent of NEPA.

As in IT Corp, we find 40 C.F.R. § 124.9(b)(6) dispositive on the question of the UIC permit program’s functional equivalence to NEPA. Under the plain language of this regulatory provision the Region was not required to prepare an
EIS in support of the Permit. The Board, thus, finds that the Region has not committed clear error in its determination that an EIS was not required. Accordingly, review is denied for parts I, II, those portions of III that raise NEPA issues, IV, and V of Sierra Club’s Petition.

2. Baseline Water Quality Data

Both petitioners raise objections to the groundwater quality data submitted in the permit application. Petitioners challenge the Region’s use of the applicant’s groundwater data to determine what aquifers qualify as USDWs. Although not explicitly stated, the petitioners apparently believe that additional USDWs exist within the permit area beyond those USDWs already identified at and above the Uinta portion of the Upper Aquifer. Petitioner Sierra Club argues that the data the Region relied upon to issue the Permit are inaccurate, calling the data “misleading and problematic.” Sierra Club’s Brief at 12. Petitioners argue that American Soda’s groundwater quality data create the misleading impression that virtually all of the groundwater at or near the mine site is already contaminated, and thus not qualifying as a USDW. Dodson’s Petition for Review and Statement of Reasons (“Dodson’s Brief”) at 11. Sierra Club states in its brief, “[t]here is no evidence the EPA looked into this problem, asked the project proponent for more data, or did anything else to address the concern * * *. ” Sierra Club’s Brief at 12. Petitioner Dodson contends that

[Region VIII] blindly accepted American Soda’s contention that only the Uinta portion of the Upper Aquifer qualifies as USDW, despite the fact that regional groundwater quality data strongly suggests that portions of the Lower Aquifer, which lie immediately above the injection zone, may also be USDW.

Dodson’s Brief at 9.

Petitioners also argue that the Region failed in its legal duty to identify all USDWs that exist within the permit area because the Region issued its area permit to American Soda prior to requiring additional groundwater data collection. Petitioners cite 40 C.F.R. § 146.34, a rule describing the information the permitting authority must consider when permitting Class III wells. Petitioners inter-
pret 40 C.F.R. § 146.34(a) as requiring the collection of additional groundwater data prior to issuing the Permit.

Additionally, Petitioners argue that by requiring American Soda to collect five additional quarters of groundwater data to establish the groundwater quality baseline before commercial mining operations begin, the Region implicitly admits the inadequacy of the data on which it relied in issuing this Permit. Sierra Club contends that this condition merely puts off one of the most important issues in permitting and environmental analysis until after the Permit is issued. Sierra Club’s Brief at 13. Dodson argues that, even with the additional sampling contemplated by the Permit, the monitoring plan itself is inadequate because the Region has failed to establish the direction of groundwater flow in the area covered by the Permit.

Region VIII responds to petitioners’ inadequate groundwater data argument by stating that the Permit protects all aquifers, whether or not they qualify as USDWs, through well construction, operating and monitoring requirements, as well as through the prescribed manner in which EPA and the operator will monitor for, discover, and remedy any problem that might arise. Thus, according to the Region, the Permit does not depend on full characterization of all aquifers at this site because the Permit’s conditions are sufficiently protective to ensure protection of even the most sensitive aquifers — USDWs.

The Region notes that the Permit requires American Soda to collect five additional quarters of water quality data from 25 sampling points before American Soda can begin to use any of the initial 25 wells for commercial mining, Region’s Brief at 28, and that the Permit prohibits American Soda from constructing additional mining wells until it submits the monitoring results for EPA evaluation under 40 C.F.R. § 144.33. Id. The Region explains that these additional data will serve to establish a broader view of the baseline conditions of the aquifers in the area of review, and other data may be included in the application by reference provided they are current, readily available to the Director and sufficiently identified to be retrieved.

(a) Prior to the issuance of a permit for an existing Class III well or area to operate or the construction of a new Class III well the Director shall consider the following:

(4) Maps and cross sections indicating the vertical limits of all underground sources of drinking water within the area of review, their position relative to the injection formation, and the direction of water movement, where known, in every underground source of drinking water which may be affected by the proposed injection.
the area so that any deviations from the baseline will be recognizable. See Permit Appendix I p.1.

Further, the Region states that, contrary to petitioner’s argument, the Region has satisfied 40 C.F.R. § 146.34 through its review of the applicant’s sampling data on local aquifers and ground-water direction, regional geological and hydrological data from the Class III permit application and operations reports for the ongoing UIC Class V operation at the site. Region’s Brief at 27. The Region argues that the information contained in the initial permit application provides an adequate basis to authorize the construction of the 25 wells contemplated for the first year of the Permit. The Region further states that it accepts similar data from other UIC permit applicants as adequate for characterizing groundwater. Region’s Brief at 27.

In support of its determination that the applicant’s groundwater data are reliable, the Region cites American Soda’s supplemental sampling data as consistent with the initial sampling data.

[T]he concentration of Total Dissolved Solids (‘TDS’) in ground water, the determining factor as to whether an aquifer is a potential USDW, remain [sic] generally constant within a reasonably expected range throughout the sampling period, lending credibility to the total data interpretation of the area within the initial five year mining panel.

Region’s Brief at 33.

In response to Dodson’s challenge that the monitoring plan is flawed in terms of its assumptions regarding groundwater flow, the Region responded,

[i]f results from the planned [monitoring] wells indicate that additional [monitoring] wells or studies are needed because of variations in direction of ground-water flow from that assumed, EPA will require installation of additional [monitoring] wells.

Region VIII’s Response to Comments, at 19, comment 6.

15 American Soda obtained a Class V UIC Permit from EPA for limited experimental testing of its solution mining wells prior to its Class III permit application.

16 American Soda has submitted sampling data from three monitoring wells and two bore holes (one later completed as a water well, within the area of review for the Permit) ranging from January 1997 — March 2, 2000. Region’s Brief at 33. As American Soda’s original application was dated August 28, 1998, the record necessarily includes additional sampling data beyond that which was included in the original application.
In approaching this issue, we find significant the Region’s conclusion, essentially unchallenged by petitioners,\(^{17}\) that even if the site’s aquifers are USDWs the Permit’s conditions will provide adequate protection. With this as a starting point, the Region’s approach to the question of groundwater data becomes clearer. In the Region’s view, while it believes that the groundwater data upon which the Permit was issued complied with the governing regulations, additional sampling and analysis was desirable as a means of providing as complete a picture as possible of baseline conditions against which changing conditions in the area can be measured. In addition, it regards the requirement in the Permit for five more quarters of groundwater data as a safety valve in the event that the data collected for any reason suggests that the Permit is not sufficiently protective — a scenario that the Region regards as unlikely given its conclusion that the Permit will protect USDWs in any event. Because, under the Permit, the Director is given the right to review the data and must give approval before mining operations begin, the Region retains the authority to require adjustments before mining operations begin, as necessary.

Against this backdrop, petitioners raise two principle and related concerns: 1) that, under the applicable regulations, area groundwater must have been fully characterized before the Permit was issued, and 2) that the initial groundwater monitoring data upon which the Permit was predicated was unreliable. Again, petitioners have not mounted a serious challenge to the Region’s conclusion that the Permit is, in any event, protective of USDWs.

With respect to the first of petitioners’ concerns, we find nothing in the regulations which compels the conclusion suggested by petitioners. Rather, by our reading, the regulations accord considerable discretion to the Regional Administrator in determining an application’s sufficiency. 40 C.F.R. § 144.31 states, “An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction.” 40 C.F.R. § 146.34(a)(4), cited by petitioners in support of their position, does not compel a contrary conclusion. This provision requires only that the Region, prior to issuing a Class III permit, consider:

Maps and cross sections indicating the vertical limits of all underground sources of drinking water within the area of review, their position relative to the injection formation, and the direction of water movement, where known, in every underground source which may be affected by the proposed injection.

\(^{17}\) Petitioners intimate that the Permit might not be protective of USDWs but fail to point to any particular feature of the Permit as not being protective. As we have held in the past, generalized concerns that are not tied to particular permit terms are not suitable for Board review. See In re Environmental Disposal Systems, Inc., 8 E.A.D. 23, 35 (EAB 1998).
While the provision contemplates that available information of the kind referenced be considered by the permitting authority in issuing a permit, it does not preclude the issuance of a permit that includes provision for further groundwater characterization post-permit issuance.

For these reasons, in a similar UIC permitting matter, the Board denied review of a Region’s decision to issue two Class I UIC permits. See In re Envotech, L.P., 6 E.A.D. 260 (EAB 1996). In that case, the petitioner challenged the adequacy of the geological data the Region relied upon to issue the permits in question in the case. There, as here, the Region required additional sampling and analysis after issuance of the permit to gather more data on the geology of the area prior to initiation of hazardous waste injection. Envotech, 6 E.A.D. at 260.

In keeping with our decision in Envotech, we find in this case that the Region has satisfied the requirements of the regulations by considering the data in the application, the regional data known at the time of the permit application and the comments submitted to the Region. Its decision to further characterize the groundwater post-permit issuance was not clearly erroneous.

This concluded, the dispute regarding the adequacy or accuracy of the pre-issuance groundwater data becomes less significant. Any deficiencies in the data can be cured through the five additional quarters of sampling and analysis required by the Permit before mining operations can begin.

This is not to say that we are persuaded that petitioners have shown that the Region’s reliance on the groundwater data before it was clearly erroneous. As we have previously observed,

When 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 cases where the views of the Region and the petitioner indicate bona fide differences of expert opinion or judgement on a technical issue, the Board typically will defer to the Region.


In this case, the record reflects a credible basis for the Region’s conclusion

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18 Pursuant to 40 C.F.R. § 144.6, Class I wells are hazardous waste injection wells.
that the information before it was reliable. Although petitioners have questioned the reliability of this body of information, it is noteworthy that, according to the Region, this initial body of data is corroborated by subsequent sample results that are in the same range as the initial data. Region’s Brief at 33. At bottom, the question of the reliability of the data is a difference of expert opinion, and consistent with our prior holdings, we will defer to the Region on this point.

In sum, the petitioners have not met their burden of demonstrating the Region committed clear error on this issue. In reviewing the administrative record, particularly the Region’s response to comments, we conclude that the Region has adequately explained its rationale and addressed commentors’ concerns regarding the protection of USDWs, the location of wells, and the groundwater quality data. Petitioners have not demonstrated that the Region was clearly erroneous in concluding that initial groundwater information before it was reliable. Moreover, the provision in the Permit for five additional quarters of sampling and analysis, coupled with the Region’s authority under the Permit to withhold its assent to the initiation of mining activity in the event that the sampling and analysis point to a need for additional analysis of additional controls, is an adequate response to any lingering concerns about the quality of the initial groundwater data. Accordingly, the Board denies review on this issue.

3. Saulnier’s Area Groundwater Study

Petitioner Dodson challenges the Region’s addition of the Saulnier report in the administrative record because the Region did not publicly disclose the exis-

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19 The Region considered the following information in its permitting decision: applicant’s sampling data on local aquifers and groundwater direction; regional geological and hydrological data from the Class III permit application; operations reports for the ongoing UIC Class V operation at the site; and comments submitted on the draft permit. See Region VIII’s Response to Comments at 10; Administrative Record Index.

20 The Region also has authority under the regulations to modify or revoke the Permit in the event that it subsequently determines the Permit is not sufficiently protective of USDWs. Notably, pursuant to 40 C.F.R. § 124.5, any interested person has the right to petition the Director for modification, revocation and re-issuance, or termination of a UIC permit where the Director has received information that indicates cumulative effects on the environment are unacceptable. Thus, if the additional groundwater sampling contemplated by the Permit reveals that USDWs are not protected under the Permit, the regulations provide a later avenue by which an interested person may seek review of the Permit. See 40 C.F.R. § 124.5 and 40 C.F.R. § 144.39.

21 Dr. Saulnier’s report, entitled “Groundwater Quality in Piceance Creek Basin” (September 7, 1999) (“Saulnier’s Report”) reviewed the undisturbed groundwater quality in the Piceance Creek Basin, and the groundwater quality data from the Yankee Gulch Sodium Minerals Project site.

In the report, Dr. Saulnier describes undisturbed groundwater in the bedrock aquifers in the Piceance Creek Basin as ranging from 800 to 1500 mg/L total dissolved solids (“TDS”) in the Yankee Gulch lease area. Dr. Saulnier notes that groundwater samples taken from American Soda wells indi-
tence of the report or the Region’s intent to use the report until after the close of public comment period on the draft permit. Dodson’s Brief at 19. Petitioner contends that allowing the Region to rely on the report would “thwart the key role of public participation in the UIC permit program.” Dodson’s Brief at 19.

Petitioner alternatively argues that even if it was proper to include the report in the administrative record, the report fails to reconcile the wide variation between total dissolved solids (“TDS”) sampling data from American Soda’s wells, and TDS values from regional groundwater data. Dodson further attacks the Saulnier report as incomplete in its discussion of potential sources of contamination and questions the factual bases for Dr. Saulnier’s opinions. Dodson’s Brief at 20.

In response, Region VIII distinguishes between its responsibility to accept public comment on a permit and its responsibility to prepare an administrative record for the Permit. The Region argues that the Agency is not restricted from considering relevant information that was submitted after the public comment period, and that indeed it would have erred by not incorporating the report into the administrative record. Additionally, the Region takes issue with petitioner’s statement that the Region “heavily relied” on this report to support the Permit. The Region argues that, given the permit conditions and other data considered, the Saulnier report was not critical to its permit decision. Region’s Brief at 32 and 35.

The Region cites the Saulnier report in its Response to Comments and explains that American Soda provided EPA with a copy of the report in September of 1999. Region VIII’s Response to Comments at 12. Pursuant to 40 C.F.R. § 124.17(b), because the Region used the report in its response to comments, the report must be included in the administrative record. Section 124.17(b) states,

[A]ny documents cited in the response to comments shall be included in the administrative record for the final permit decision * * *. If new points are raised or new material supplied during the public com-

(continued)

cate that some of the groundwater in this area has significantly higher dissolved solids concentrations than earlier data indicate. In examining these new data, the report states,

Recent data and events occurring after the collection of the data in the USGS reports and Saulnier [report] (1978) indicate that events and processes extraneous to the Yan-
kee Gulch lease may have contributed to degradation of Lower Aquifer groundwater.

Saulnier’s Report at 7. Dr. Saulnier points to several potential sources of previous inter-aquifer contamination in the Piceance Creek Basin. These sources include an improperly abandoned well, 20-1, dating back to 1966, and Shell Oil Co.’s disposal well, D-1 which injected over 3 million gallons of sodium-bicarbonate waste water into the Lower Aquifer in 1971. Saulnier’s Report at 7-8.
ment period, EPA may document its response to those matters by adding new materials to the administrative record.

40 C.F.R. § 124.17(b). Thus, the regulations, themselves, provide for the addition of documents after the close of the public comment period.

Furthermore, part 124 defines what the administrative record for a final permit should include. 40 C.F.R. § 124.18(b) provides:

The administrative record for any final permit shall consist of the administrative record for the draft permit and: (1) All comments received during public comment period provided under § 124.10 (including any extension or reopening under § 124.14); (2) The tape or transcript of any hearing(s) held under § 124.12; (3) Any written materials submitted at such a hearing; (4) The response to comments required by § 124.17 and any new material placed in the record under that section; (5) For NPDES new source permits only, final environmental impact statement and any supplement to the final EIS; (6) Other documents contained in the supporting file for the permit; and (7) The final permit.

The regulations require that any additional documents under § 124.18(b) be added to the record as quickly as possible after their receipt, 40 C.F.R. § 124.18(c), and that the Region must complete the administrative record as of the date the Region issues the final permit. Id.

In a prior Board decision, we rejected a claim, similar to the one here, that the inclusion of information arriving after the public comment period closed denied the petitioner of its right to comment on the information’s validity. In *In re Caribe General Electric Products, Inc.*, 8 E.A.D. 696 (EAB 2000), we observed that part 124 did allow for information to be added to the administrative record after the public comment period and further found that the appeals process afforded petitioner the opportunity to question the validity of the document included after the comment period closed. *Id.*, 8 E.A.D. at 705 n.19. *See also In re Ash Grove Cement Co.*, 7 E.A.D. 387, 431 (EAB 1997) (“The purpose of the response to comments and any supplementation of the administrative record at that time is to ensure that interested parties have full notice of the basis for final permit decisions and can address any concerns regarding the final permit in an appeal to the Board pursuant to 40 C.F.R. section 124.19.”); *In re Amoco Oil Co.*, 4 E.A.D. 954, 980 (EAB 1993).

In keeping with our prior decisions, § 124.17(b) and § 124.18(b)(4), the Region did not err by including the Saulnier report in the administrative record. Rather, the Region used the report to respond, in part, to comments it received and, therefore, properly included the report in the administrative record.
Moreover, petitioner has not demonstrated that the Region committed clear error in its use of the Saulnier report. Given that under the Permit no injection will occur until after the aquifers in the area are further characterized, Dr. Saulnier's report is simply not vital to the Permit's issuance. Accordingly, the Board denies review of this issue.

4. Hazardous Waste Determination

The Permit describes each permissible source of fluid that American Soda can use in its injection fluid for its solution mining process. Pursuant to the Permit, injection of any hazardous waste is prohibited. Permit at 19. American Soda has determined that none of the sources of injection fluid are listed hazardous wastes, but it has not evaluated each of the permitted sources of injection fluid for hazardous characteristics. Permit Appendix I, at 21. The Permit requires American Soda to evaluate for hazardous characteristics once commercial operations begin and when any major change in the sources of its injection fluid occurs. Permit at 19.

Dodson argues that the Region can not conclude in the Permit that American Soda's injection fluids are not hazardous until American Soda demonstrates that all potential sources of fluids used in its injection fluid are not characteristically hazardous.

The Region rejects the petitioner's argument that EPA must require American Soda to evaluate whether the potential sources of injection fluid contain hazardous characteristics prior to issuing the Permit. In rejecting this argument, the Region directs us to the language in the Permit that prohibits American Soda from injecting any hazardous waste, whether a listed hazardous waste or a characteristic hazardous waste. The Region cites NE Hub Partners as support for the Region's authority to use its discretion to require analyses "that are appropriate in light of the particulars of the activity for which a permit has been requested." Region's Brief at 37 (citing In re NE Hub Partners, L.P., 7 E.A.D. 561, 582 (EAB

22 The sources of the injection fluid are: (a) depleted solution mining production fluid from which the bicarbonate/carbonate content has been mostly removed; (b) condensate water from processing equipment; (c) wash down water used in the production areas to clean up equipment; (d) dust collection water used in scrubbing dust from collected air; (e) reject product; (f) overflow collection points from the brine processing operation; (g) boiler blowdown, which is water that is purged from the boiler system to control the buildup of dissolved solids; (h) water softener backwash; (i) reverse osmosis reject; and (j) make-up water used to make up the difference between the source waters listed above and the needed volume of injection fluid.

23 Pursuant to 40 C.F.R. § 261.3, a waste is a RCRA hazardous waste if it exhibits any of the characteristics of hazardous waste identified in subpart C of part 261 (ignitability, corrosivity, reactivity or toxicity) or if it is listed in subpart D of part 261 and has not been excluded pursuant to 40 C.F.R. § 260.20 or 260.22.
The petitioners have not shown that the Region's decision to issue the Permit before completion of all work associated with characterizing both the permit area and future injection fluids was clearly erroneous.

So ordered.