(Slip Opinion)

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

In re:	)	
Environmental Disposal Systems, Inc.	)	UIC Appeal Nos. 04-01 & 04-02
UIC Permit Nos. MI-163-1W-C007 & MI-163-1W-C008	)	

[Decided September 6, 2005]

ORDER DENYING REVIEW

Before Environmental Appeals Judges Scott C. Fulton, Edward E. Reich, and Kathie A. Stein.

ENVIRONMENTAL DISPOSAL SYSTEMS, INC.

UIC Appeal Nos. 04-01 & 04-02

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Decided September 6, 2005

Syllabus

On October 18, 2004, Region V of the U.S. Environmental Protection Agency ("EPA") issued two Underground Injection Control ("UIC") permits to Environmental Disposal Systems, Inc. ("EDS") of Birmingham, Michigan, pursuant to the Safe Drinking Water Act ("SDWA"), 42 U.S.C. §§ 300h to 300h-8, and EPA's implementing regulations at 40 C.F.R. parts 124, 144, and 146-148. The permits authorize EDS to engage in the commercial disposal of hazardous waste in two "Class I" underground injection wells drilled into the Mt. Simon Formation, a porous strata of sandstone situated nearly a mile underneath the City of Romulus, Michigan. In November 2004, Mr. Alfred Brock of Canton, Michigan, and Sunoco Partners Marketing & Terminals, Inc. ("SPMT") of Philadelphia, Pennsylvania, each filed with the Environmental Appeals Board ("Board") a petition for review of the UIC permits, requesting on a variety of grounds that the permits be remanded to Region V for further consideration. The Board heard oral argument in this case on May 10, 2005.

In its appeal, SPMT presents five primary challenges to Region V's decision to issue the UIC permits to EDS. First, SPMT contends that Region V should have delayed issuing the permits until SPMT determines whether it is going to extract brine from the Mt. Simon Formation, which it would like to do as part of the petroleum storage and sales business it has long operated in Romulus on property adjacent to EDS's proposed disposal facility. Alternatively, SPMT contends that Region V should have included conditions in the UIC permits to prohibit disposal of hazardous waste until such time as it is known whether SPMT will produce brine from Mt. Simon. Both of these arguments reflect the premise that allowing EDS to dispose of hazardous waste in the permitted wells will likely preclude SPMT from extracting brine from the same area. Second, SPMT claims that Region V erroneously categorized EDS's UIC permits as UIC permits only and not also as Resource Conservation and Recovery Act ("RCRA") permits-by-rule that, by definition, must reflect RCRA requirements, which include a prohibition on the migration of contaminants underground. Third, SPMT argues that Region V failed to include conditions in the UIC permits to ensure EDS's compliance with RCRA. Fourth, SPMT contends that Region V failed to respond to a number of comments it submitted on the draft UIC permits. Fifth, SPMT asserts that Region V failed to include conditions in the UIC permits requiring security measures for EDS's hazardous waste facilities, as necessary to protect human health and the environment.

Mr. Brock, for his part, raises sixteen arguments in his petition for review. For purposes of analysis, these arguments can be grouped into five categories: (1) challenges to technical or scientific judgments made by Region V; (2) challenges raised for the first time on appeal; (3) challenges to matters that are governed by state or local law or federal law other than the SDWA/UIC program; (4) challenges that do not qualify as objections to a permit condition or Region V's compliance with the SDWA and UIC program; and (5) challenges that allege failure to respond adequately to comments.

Held: SPMT's and Mr. Brock's petitions for review are both denied on all grounds. First, with respect to SPMT's petition, the Board determines the following:

(1) *Delaying Issuance of or Conditioning EDS's UIC Permits*. To the extent SPMT's arguments in this regard can be construed as a land use or property rights challenge, the Board lacks jurisdiction to adjudicate it. With respect to SPMT's concerns about underground migration of injected contaminants into the Mt. Simon brine it wishes to extract, the Board finds that SPMT opposed EDS's UIC permits throughout these proceedings solely on the basis of migration in the RCRA sense, not in the SDWA/UIC sense. SPMT did not challenge Region V's conclusion that the proposed wells would not adversely affect underground sources of drinking water – the focus of the SDWA. As a result, the Board finds that SPMT failed to present any cognizable SDWA/UIC-specific migration claims in its petition.

Furthermore, the Board finds SPMT's arguments to be most logically understood as raising questions about Region V's prior decision to issue an exemption (the "no-migration exemption") for EDS's two injection wells from the RCRA prohibitions on the land disposal of hazardous waste. The Board observes that a party can hold a valid UIC permit without also yet possessing a RCRA no-migration exemption, so the question whether a RCRA no-migration exemption exists or does not exist is not relevant in a proceeding to determine the validity of a UIC permit decision. The Board also finds that the related question of whether a no-migration exemption itself is valid (and not simply whether an exemption exists or not) is not administratively appealable, and notes that SPMT stressed at oral argument that it was not challenging the exemption in this forum.

Finally, the Board holds that the question whether the time involved to determine the viability of SPMT's brine extraction permit – which is a State of Michigan natural resources management matter – is not germane to the question of UIC permit validity. The Board takes note of the well-established principle that a permitting authority's inquiry in issuing a UIC permit is limited solely to whether the permit applicant has demonstrated that it has complied with the federal regulatory standards for issuance of the permit. In this case, Region V determined that EDS had fulfilled this standard, and the Board finds that SPMT did not contend otherwise, nor did it cite any statutory or regulatory

authority or case precedent to support its novel proposition that a permit issuer should defer consideration of a validly submitted UIC permit application on the basis of third-party considerations analogous to those presented here.

(2) *RCRA Permits-by-Rule*. The Board holds that it lacks jurisdiction to adjudicate the question whether EDS's UIC permits qualify as RCRA permits-by-rule because that is a RCRA issue and not a UIC one. However, even if the Board did have jurisdiction, it would find that SPMT's arguments must fail because facilities such as EDS that have other RCRA-regulated units on-site besides an injection well must do more than simply obtain a UIC permit to also have a RCRA permit-by-rule. The facilities must obtain a RCRA permit for the other units and then comply with corrective action requirements specified in that permit for the well and all other regulated units, which has not occurred in the instant case.

(3) *Inclusion of RCRA No-Migration Condition No. 9 in UIC Permits*. The Board holds that Condition No. 9 of the no-migration exemption, which automatically terminates the exemption in the event a brine extraction well is drilled and used to produce brine from any strata in the hazardous waste injection zone, is essentially integrated into the UIC permits by virtue of one of the terms of the UIC permits. Accordingly, the practical effect of more explicitly incorporating Condition No. 9, as SPMT requests, would be nil.

(4) *Region V Response to Comments*. The Board holds that Region V provided adequate consideration of and response to SPMT's comments on the draft UIC permits.

(5) *Security Measures*. The Board holds that SPMT failed to identify any SDWA or UIC program provision that directs permit issuers to incorporate anti-terrorism or other security measures in UIC permits.

With respect to Mr. Brock's petition, the Board determines the following:

(1) *Technical Issues*. The Board holds that Mr. Brock failed to present any sufficiently specific or compelling evidence or argument that would cast doubt on the thoroughness or rationality of the Region's technical evaluations and conclusions.

(2) *Claims Raised for First Time on Appeal*. The Board rejects a number of arguments impermissibly raised by Mr. Brock for the first time on appeal.

(3) *State, Local, and Non-SDWA/UIC Federal Laws*. The Board finds that challenges to matters governed by non-SDWA/UIC programs (such as state laws or other federal laws) are not proper subjects of the Board's jurisdiction in a UIC permit appeal.

(4) *Claims That Do Not Challenge UIC Permit Conditions*. The Board holds that Mr. Brock failed to link a number of his objections to any particular condition of the UIC permits or to any other element of the SDWA and UIC regulations that might be subject to scrutiny in this forum.

(5) *Failure to Respond to Comments.* Finally, the Board holds that Region V adequately considered and responded to a comment inquiring into the cost to taxpayers of the EDS project.

Before Environmental Appeals Judges Scott C. Fulton, Edward E. Reich, and Kathie A. Stein.

Opinion of the Board by Judge Reich:

On October 18, 2004, Region V of the U.S. Environmental Protection Agency ("EPA" or "Agency") issued two Underground Injection Control ("UIC") permits to Environmental Disposal Systems, Inc. ("EDS") of Birmingham, Michigan, pursuant to the Safe Drinking Water Act ("SDWA"), 42 U.S.C. §§ 300h to 300h-8, and EPA's implementing regulations at 40 C.F.R. parts 124, 144, and 146-148. The permits authorize EDS to engage in the commercial disposal of hazardous waste in two "Class I" underground injection wells drilled into the Mt. Simon Formation, a porous strata of sandstone situated nearly a mile underneath the City of Romulus, Michigan, beneath multiple layers of dense limestone and shale. In November 2004, Mr. Alfred Brock of Canton, Michigan, and Sunoco Partners Marketing & Terminals, Inc. ("SPMT") of Philadelphia, Pennsylvania, each filed with the Environmental Appeals Board ("Board") a petition for review of the UIC permits, requesting on a variety of grounds that the permits be remanded to Region V for further consideration. For the reasons set forth below, the petitions for review are denied.

I. *BACKGROUND*

A. *Statutory and Regulatory Background*

In the 1930s-1940s, waste generators in government and industry devised a method of disposing of fluid wastes by pumping, or "injecting," the wastes into wells bored deep into the earth. Office of

Water, U.S. EPA, Pub. No. 816-R-01-007, *Class I Underground Injection Control Program: Study of the Risks Associated with Class I Underground Injection Wells*, at ix, 5 (Mar. 2001).[1] Injection activities proliferated in the 1950s-1960s as hazardous waste generators found the practice to be less costly than other accepted disposal methods. By the early 1970s, a number of entities began to express concern about the "substantial hazards and dangers associated with deep well injection of contaminants" and the "indiscriminate 'sweeping of our wastes underground.'" H.R. Rep. No. 93-1185, at 29 (1974), *reprinted in* Senate Comm. on Env't & Pub. Works, No. 97-9, *A Legislative History of the Safe Drinking Water Act* 561 (Feb. 1982) [hereinafter *SDWA Legis. Hist.*]. These parties recognized the difficulties of monitoring the impacts of injected wastes on the subterranean environment, including underground aquifers containing drinking water, mineral deposits, and other resources, and urged caution in further use of the disposal technique. Congress subsequently became aware that deep-well injection of hazardous waste posed a potential threat to drinking water supplies and identified the practice as "an increasing problem," observing:

> Municipalities are increasingly engaging in underground injection of sewage, sludge, and other wastes. Industries are injecting chemicals, byproducts, and wastes. Energy production companies are using injection techniques to increase production and to dispose of unwanted brines brought to the surface during production. Even government agencies, including the military, are getting rid of difficult to manage waste problems by underground disposal methods.

Id. Accordingly, in 1974, Congress enacted the Safe Drinking Water Act to, among other things, protect underground sources of drinking water,

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[1] *See also* U.S. General Accounting Office, GAO/RCED-87-170, *Hazardous Waste, Controls Over Injection Well Disposal Operations: Report to the Chairman, Environment, Energy, and Natural Resources Subcommittee, Committee on Government Operations, House of Representatives* 8 (Aug. 1987); Earle A. Herbert, *The Regulation of Deep-Well Injection: A Changing Environment Beneath the Surface*, 14 Pace Envtl. L. Rev. 169, 172 (1996).

or "USDWs," from contaminants introduced via underground waste disposal practices. *Id*. at 1-2, *reprinted in SDWA Legis. Hist.* at 533-34.

In part C of the SDWA, titled "Protection of Underground Sources of Drinking Water," Congress directed EPA to establish permitting and operating requirements for underground injection wells to prevent endangerment of drinking water sources. SDWA §§ 1421, 1422(c), 42 U.S.C. §§ 300h, 300h-1(c). Congress designed the statute to give primary enforcement authority over drinking water safety to states, provided the states developed UIC programs that were consistent with EPA regulations and received EPA approval of their programs prior to implementing them. *See* SDWA §§ 1421-1429, 42 U.S.C. §§ 300h to 300h-8. In cases where states had not yet applied for authorization to implement SDWA UIC programs within their borders, or where a state's UIC program had failed to win or maintain EPA approval, Congress assigned to EPA the responsibility for prescribing and administering UIC programs in such states.[2] SDWA § 1422(c), 42 U.S.C. § 300h-1(c). EPA promulgated initial regulations to implement these statutory provisions in the early 1980s. *See* 45 Fed. Reg. 42,472 (June 24, 1980) (codified as amended at 40 C.F.R. pt. 146) (technical well criteria and standards); 48 Fed. Reg. 14,146 (Apr. 1, 1983) (codified as amended at 40 C.F.R. pts. 144-146) (UIC program rules); 49 Fed. Reg. 20,138 (May 11, 1984) (codified as amended at 40 C.F.R. pts. 144, 147) (EPA-administered UIC programs).

In 1976, two years after enacting the SDWA, Congress promulgated the Resource Conservation and Recovery Act ("RCRA") to regulate "the treatment, storage, transportation, and disposal of hazardous wastes [that] have adverse effects on health and the environment." Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580, § 1003(4), 90 Stat. 2795, 2798 (1976). Congress strengthened RCRA in 1984 by enacting the Hazardous and Solid Waste Amendments, in which Congress announced its finding that "certain classes of land disposal facilities are not capable of assuring long-term containment of certain

[2] Michigan is one of the states in which EPA, rather than a state agency, acts as the UIC permitting authority. 40 C.F.R. § 147.1151.

hazardous wastes, and to avoid substantial risk to human health and the environment, reliance on land disposal should be minimized or eliminated, and land disposal, particularly landfill and surface impoundment, should be the least favored method for managing hazardous wastes." Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-616, tit. I, § 101(a)(1), 98 Stat. 3221, 3224 (1984) (codified at 42 U.S.C. § 6901(b)(7)). As part of a set of "Land Disposal Restrictions" (also known as the "Land Ban") flowing from this finding, Congress directed EPA to prohibit the deep-well disposal of hazardous waste unless it could reasonably be determined that such disposal would be protective of human health and the environment for as long as the waste remained hazardous. *Id*. tit. II, § 201(a), 98 Stat. at 3229 (codified at 42 U.S.C. § 6924(f)(2)).

Congress created two exemptions to the ban on land disposal of hazardous waste: (1) pretreatment; and (2) no migration. First, if hazardous waste is treated so as to minimize the short- and long-term threats to human health and the environment posed by hazardous constituents in the waste, it may be land-disposed. RCRA § 3004(m), 42 U.S.C. § 6924(m). Second, if EPA determines that hazardous constituents will not migrate out of the disposal unit or injection zone after hazardous waste is disposed therein, the waste may be land-disposed. RCRA § 3004(d)(1), (e)(1), (g)(5), 42 U.S.C. § 6924(d)(1), (e)(1), (g)(5). EPA may grant a "no-migration exemption" if an applicant demonstrates, to a reasonable degree of certainty, that there will be no migration of hazardous constituents for as long as the waste remains hazardous. RCRA § 3004(d)(1), 42 U.S.C. § 6924(d)(1); *accord* 40 C.F.R. § 148.20(a). This demonstration requires a showing that the hydrogeological and geochemical conditions at the disposal site and physiochemical nature of the waste are such that reliable predictions can

be made that injected fluids will not migrate within 10,000 years.[3] 40 C.F.R. § 148.20(a)(1)(i).

In 1988, EPA promulgated final regulations that implemented these RCRA provisions and simultaneously amended the UIC program regulations the Agency had promulgated earlier pursuant to the SDWA. *See* 53 Fed. Reg. 28,118 (July 26, 1988) (codified as amended at 40 C.F.R. pts. 124, 144, 146, 148). Among many other things, the regulations establish five "classes" of injection wells. 40 C.F.R. § 144.6; *see In re Am. Soda, L.L.P.*, 9 E.A.D. 280, 281 n.1 (EAB 2000). Class I wells of the type at issue in this case are wells used by "owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water." 40 C.F.R. § 144.6(a). The regulations also specify that owners and operators of injection wells used to dispose of hazardous waste must obtain authorization to operate under both the SDWA and RCRA. 52 Fed. Reg. 45,788, 45,791 (Dec. 1, 1987). Indeed, EPA made clear that "[n]either RCRA nor SDWA authorization alone is sufficient to inject hazardous waste." *Id*.

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[3] EPA interprets the "reasonable degree of certainty" standard to require an applicant for a no-migration exemption to provide:

> Reasonably trustworthy information and data such that the totality of the facts and circumstances within the Agency's knowledge be sufficient, in light of its scientific and technical expertise, to warrant a firm belief that no migration of hazardous constituents from the injection zone will occur in 10,000 years.

69 Fed. Reg. 15,328, 15,330 (Mar. 25, 2004) (citing *Kay v. EPA*, No. 6:90-CV-582, slip op. at 5 (E.D. Tex. Aug. 3, 1993) (reviewing no-migration exemption decision issued by EPA Region VI as "final agency action," pursuant to Administrative Procedure Act, 5 U.S.C. §§ 701-706)). Furthermore, "EPA does not interpret the standard to require proof beyond a reasonable doubt, or to require that facts be proven to be extremely likely. The regulations at 40 C.F.R. § 148.20(a)(1), which govern this demonstration, require a showing that reliable predictions can be made based on conditions at the site." 69 Fed. Reg. at 15,330.

On the SDWA side, a party that wishes to inject hazardous waste into a deep injection well must obtain a UIC permit authorizing the activity. 40 C.F.R. § 144.31. Injection activities that would facilitate the movement of contaminant-bearing fluids into USDWs, where the contaminants may cause a violation of a primary drinking water standard or otherwise adversely affect the health of persons, are prohibited and may not be permitted. 40 C.F.R. §§ 144.1(g), .12(a)-(b), .52(a)(9). On the RCRA side, a well owner/operator may obtain RCRA authorization through "interim status"[4] or by operation of the regulations (i.e., a "permit-by-rule"). 40 C.F.R. §§ 265.430, 270.1, .60(b). EPA promulgated the permit-by-rule option for Class I injection wells to streamline the permitting process and eliminate duplication between SDWA and RCRA regulatory requirements for such wells. *See* 45 Fed. Reg. 33,290, 33,326 (May 19, 1980).

Notably, the UIC regulations interweave SDWA and RCRA requirements in several places, thereby revealing the complexity of the dual statutory system Congress created to regulate hazardous waste injection activities. *See*, *e.g.*, 40 C.F.R. §§ 144.1, .14, .31, 146.2, .7, .9. In some instances, it can be difficult to recognize Agency rules as having their source of authority in one statute or the other (or both). As a general matter, however, the legal provisions governing injection wells can be distinguished on the basis of their intended purpose. The UIC portions of the SDWA, and the regulations implementing those provisions, are narrowly focused on protecting USDWs from contamination caused by injection of wastes into underground wells. The relevant RCRA statutory and regulatory provisions, on the other hand, are more broadly intended to protect human health and the environment from the harmful effects of injected hazardous wastes. *See Natural Res. Def. Council, Inc. v. EPA*, 907 F.2d 1146, 1157 (D.C. Cir. 1990) (distinguishing SDWA and RCRA treatment of injected hazardous wastes).

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[4] RCRA "interim status" facilities are "considered to have a pending permit application, and must submit required information when it is called in by the regulatory authority." 52 Fed. Reg. at 45,791.

B. *Factual and Procedural Background*

This case revolves around a natural resource called the "Mt. Simon Formation," which is an enormous geological structure comprised of sandstone that underlies portions of Michigan, Indiana, Illinois, Ohio, and Wisconsin. EPA Region V has found this structure to be geologically suited for use as a hazardous waste disposal site in a number of discrete locations in the Great Lakes region.[5] EDS wishes to join the entities authorized to use the Mt. Simon for hazardous waste disposal purposes, in its case in the vicinity of Romulus, Michigan. Accordingly, in 1996, EDS applied to Region V for permission to construct and operate two Class I commercial injection wells on a fifteen-acre parcel at 28470 Citrin Drive in Romulus. Region V issued final UIC permits for the wells in 1998, and, later that year, the Board denied two petitions seeking review of the permits. *See In re Envtl. Disposal Sys., Inc.*, 8 E.A.D. 23 (EAB 1998). EDS proceeded to apply for other state and local permits, construct the two wells, and gather information needed to apply for a no-migration exemption to the RCRA ban on land disposal of hazardous waste.

In January 2000, EDS petitioned Region V for a RCRA no-migration exemption for its two wells, and, on March 25, 2004, the Region issued the requested exemption in final form. 69 Fed. Reg. 15,328 (Mar. 25, 2004); *see* 67 Fed. Reg. 77,981 (Dec. 20, 2002) (draft version of no-migration exemption for EDS). In the intervening four years between petition and approval, EDS finished constructing the wells and a waste treatment and storage facility on the land surface above the wells, and the company also applied for a renewal of its UIC permits,

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[5] *See* 67 Fed. Reg. 20,971 (Apr. 29, 2002) (four Class I injection wells, Vickery Environmental, Inc., Vickery, Ohio); 63 Fed. Reg. 23,786 (Apr. 30, 1998) (three Class I wells, Warner Lambert Co. Parke-Davis Division, Holland, Michigan); 62 Fed. Reg. 47,205 (Sept. 8, 1997) (two Class I wells, Pharmacia & Upjohn, Kalamazoo, Michigan); 60 Fed. Reg. 51,476 (Oct. 2, 1995) (four Class I wells, BP Chemicals, Inc., Lima, Ohio); 55 Fed. Reg. 33,373 (Aug. 15, 1990) (one Class I well, National Steel Corp. Midwest Steel Division, Portage, Indiana); 55 Fed. Reg. 32,294 (Aug. 8, 1990) (one Class I well, LTV Steel Co., Hennepin, Illinois); 55 Fed. Reg. 32,293 (Aug. 8, 1990) (three Class I wells, Bethlehem Steel Corp. Burns Harbor Plant, Chesterton, Indiana); 55 Fed. Reg. 21,236 (May 23, 1990) (two Class I wells, Armco Steel Co., Middletown, Ohio).

which were set to expire in 2003. In May 2004, Region V issued draft decisions proposing to renew EDS's UIC permits and accepted public comments thereon through July 12, 2004. The Region also held a public hearing on the permits on June 29, 2004. *See* EPA Ex. 4 (Public Hearing Transcript, Hazardous Waste Injection Well Permits Renewal, EDS (June 29, 2004)) [hereinafter Hearing Tr.]. On October 18, 2004, Region V issued final renewals of EDS's two UIC permits, along with a document responding to public comments on the draft permit decisions. *See* EPA Exs. 1-2 (U.S. EPA Region V, *Underground Injection Control Permits No. MI-163-1W-C007 and -C008 (Class I Commercial Hazardous) for Environmental Disposal Systems, Inc.* (Oct. 18, 2004)) [hereinafter UIC Permits]; EPA Ex. 3 (U.S. EPA Region V, *Response to Comments on UIC Permits No. MI-163-1W-C007 and -C008 Issued to EDS* (Oct. 18, 2004)) [hereinafter RTC Doc.]. EDS has also applied to the Michigan Department of Environmental Quality ("MDEQ") for a RCRA permit to operate the hazardous waste treatment and storage facility it has constructed on the surface, above the injection wells. At this writing, to the best of our knowledge, that permit decision is still pending.

While all this activity was going on on EDS's side, SPMT was operating a liquefied petroleum gas storage and transfer facility on land adjacent to the planned EDS facility, on a site it has employed for this purpose for more than fifty years. SPMT stores petroleum products in subterranean caverns and injects brine into the caverns to force product out for distribution to energy consumers. In the 1990s, SPMT decided to expand its facilities to meet increased energy demands, and thus on November 1, 1999, the company applied for a UIC permit to dispose of nonhazardous waste brine in the Mt. Simon Formation. SPMT also applied to MDEQ in September 2001 for a permit to extract brine from the Mt. Simon Formation, for use in its gasoline transfer activities. On February 26, 2002, Region V issued a final UIC permit to SPMT for disposal of waste brine in the Mt. Simon Formation, and on July 11, 2002, the Board issued an order denying review of two petitions for review of that UIC permit decision. *In re Sun Pipe Line Co.*, Order Denying Petitions for Review, UIC Appeal Nos. 02-01 & -02 (EAB July 11, 2002). In addition, on May 29, 2003, MDEQ issued a permit to

SPMT authorizing the company to extract brine from the Mt. Simon Formation.

EDS's two hazardous waste injection wells are situated only a half-mile away from the site of SPMT's brine extraction well. Due to the proximity of the wells, the two companies are at odds over each other's potential use of the Mt. Simon Formation. SPMT is concerned that if EDS is allowed to inject hazardous waste into the Formation, the brine there will become contaminated, and the contaminants will "migrate" or move toward the brine extraction well SPMT wishes to operate as part of its petroleum storage business. SPMT recently learned that brine contained in the Lockport Formation, a geological structure situated closer to the surface than the Mt. Simon, is not suitable for its purposes, so the company purportedly must use the Mt. Simon Formation to obtain the brine needed to expand its fuel operations. For this reason, SPMT believes EDS should be prevented from injecting hazardous waste into the Mt. Simon Formation and contaminating the brine there for hundreds or thousands of years, which would make it very difficult if not impossible for SPMT to use that brine in its business operations. EDS, for its part, would like to protect its own economic position by ensuring its extensive investment in the Romulus wells to date is not forfeited. Accordingly, both parties have embarked upon an aggressive program of litigation, in numerous fora, to protect their own interests.

For instance, EDS challenged SPMT's brine extraction permit in Michigan's Ingham County Circuit Court immediately after MDEQ issued that permit. On June 21, 2004, the court held SPMT's brine production permit to be null and void, and SPMT and MDEQ promptly appealed the ruling. The case is currently pending before the Michigan Court of Appeals, and the parties have advised us that a decision, or an oral argument schedule, is expected soon. On June 24, 2004, SPMT filed with the United States Circuit Court of Appeals for the Sixth Circuit a petition for review of Region V's decision to grant a RCRA no-migration exemption for EDS's two Romulus injection wells. This challenge is also pending but has been stayed until other litigation is resolved. SPMT also recently filed a petition with Region V asking the Agency to terminate EDS's no-migration exemption on the ground that the bases for

some of the conditions and assumptions of that exemption have changed. That petition is also pending.

On November 3, 2004, Mr. Alfred Brock of Canton, Michigan, filed a petition for review of the UIC permits Region V issued to EDS for its hazardous waste wells. *See* Letter from Alfred Brock to Clerk of the Environmental Appeals Board (Nov. 3, 2004) ("Brock Pet'n"). On November 17, 2004, SPMT followed suit by also filing a petition for review of the UIC permits and, in addition, requesting oral argument. *See* SPMT Petition for Review (Nov. 17, 2004) ("SPMT Pet'n"). On January 19, 2005, Region V filed a response to the two petitions, as did EDS, whom the Board had previously granted leave to intervene in the case. *See* U.S. EPA Region V, Response to Petitions for Review (Jan. 19, 2005) ("EPA Br."); EDS's Response to Petitions for Review (Jan. 19, 2005) ("EDS Br."). On February 11, 2005, SPMT filed a motion for leave to reply to the Region V and EDS responses, along with a reply brief, which the Board accepted. *See* SPMT's Reply to the U.S. EPA and EDS Responses to the Petition for Review (Feb. 11, 2005) ("SPMT Reply"). The Board heard oral argument on the SPMT petition on May 10, 2005. *See* Transcript of May 10, 2005 Oral Argument ("Oral Arg. Tr."). The case now stands ready for decision by the Board.

II. *DISCUSSION*

Under the 40 C.F.R. part 124 rules that govern this permit proceeding, the Board may grant review of a UIC permit if the permit is based on a clearly erroneous finding of fact or conclusion of law or involves an important matter of policy or exercise of discretion that warrants Board review. 40 C.F.R. § 124.19(a); 45 Fed. Reg. 33,290, 33,412 (May 19, 1980); *see In re Puna Geothermal Venture*, 9 E.A.D. 243, 255-62, 263-65, 269-70, 272 (EAB 2000) (remanding portions of UIC permit pursuant to section 124.19(a)); *In re Jett Black, Inc.*, 8 E.A.D. 353, 367-73 (EAB 1999) (same), *appeal dismissed for lack of standing sub nom. Levine v. EPA*, No. 01-3072 (6th Cir. Feb. 18, 2003); *In re Beckman Prod. Servs.*, 8 E.A.D. 302, 310-13 (EAB 1999) (same). The Board's analysis of UIC permits is guided by the preamble to the part 124 rules, which states that the Board's power of review "should be only sparingly exercised" and that "most permit conditions should be finally

determined at the [permit issuer's] level." 45 Fed. Reg. at 33,412; *accord In re Am. Soda, L.L.P.*, 9 E.A.D. 280, 286 (EAB 2000); *In re Envotech, L.P.*, 6 E.A.D. 260, 265 (EAB 1996). The burden of demonstrating that review is warranted rests with the petitioner, who must enunciate objections to the permit and explain why the permit issuer's response to those objections is clearly erroneous or otherwise warrants review. 40 C.F.R. § 124.19(a); *see, e.g.*, *Puna Geothermal*, 9 E.A.D. at 246, 249-72; *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567, 569-89 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999).

In the instant case, we are presented with two very different constellations of challenges from the two petitioning parties. In UIC Appeal No. 04-01, Mr. Alfred Brock objects to several technical analyses conducted by the Region, various matters governed by state or non-SDWA federal law, and the Region's response to certain comments.[6] In UIC Appeal No. 04-02, SPMT contests the timing of UIC permit issuance, as well as the Region's failure to treat the UIC permits as RCRA permits-by-rule and to incorporate RCRA no-migration exemption conditions and anti-terrorism safety measures into the UIC permits. Both petitioners seek a remand of the permits to Region V for reconsideration. We will first address the issues raised in SPMT's appeal and then turn to those issues raised by Mr. Brock.

A. *SPMT Appeal*

SPMT presents five primary challenges to Region V's decision to issue the UIC permits to EDS. First, SPMT contends that Region V should have delayed issuing EDS's UIC permits until it determined whether SPMT is going to extract brine from the Mt. Simon Formation. SPMT Pet'n at 1-3. Alternatively, SPMT contends that Region V should have included conditions in the UIC permits to prohibit disposal of hazardous waste until such time as it is known whether SPMT will

[6] Mr. Brock also raises a number of arguments for the first time on appeal and makes other general claims that do not qualify as objections to particular UIC permit conditions or SDWA/UIC program compliance matters.

produce brine in Mt. Simon. *Id*. at 3-5. In essence, SPMT does not believe disposal by EDS should be permitted if SPMT is going to produce brine from the Formation. Second, SPMT claims that Region V erroneously categorized EDS's UIC permits as UIC permits only and not also as RCRA permits-by-rule that, by definition, must reflect RCRA requirements. *Id*. at 8-10. Third, SPMT argues that Region V failed to include conditions in the UIC permits to ensure EDS's compliance with RCRA. *Id*. at 10-13. Fourth, SPMT contends that Region V failed to respond to a number of comments it submitted on the draft UIC permits. *Id*. at 5-8, 12-13. Fifth and finally, SPMT asserts that Region V failed to include conditions in the UIC permits requiring security measures for EDS's hazardous waste facilities, as necessary to protect human health and the environment. *Id*. at 13-14. We address these issues in turn below.

1. *Timing of Issuance or Conditioning of EDS's UIC Permits to Accommodate SPMT Interests*

a. *SPMT Arguments*

In briefs submitted to the Board, SPMT argues that Region V acted arbitrarily and capriciously and abused its discretion by authorizing EDS's hazardous waste disposal operations on the basis of inaccurate and incomplete information. SPMT Pet'n at 1-5; SPMT Reply Br. at 1-5. SPMT points out that "[u]nder RCRA and its implementing rules, deep well injection of hazardous waste is prohibited unless a petitioner can demonstrate to a reasonable degree of certainty that the waste will not migrate for 10,000 years or as long as the waste remains hazardous." SPMT Pet'n at 3. As mentioned in Part I.A above, Region V interprets the statutory term "reasonable degree of certainty" to mean "[r]easonably trustworthy information and data such that the totality of the facts and circumstances within the Agency's knowledge [are] sufficient * * * to warrant a *firm belief* that no migration of hazardous constituents from the injection zone will occur." 69 Fed. Reg. 15,328, 15,330 (Mar. 25, 2004) (emphasis added). SPMT focuses on this notion of "firm belief" in its petition for review, arguing that Region V could not have possessed such a belief in these circumstances because the Region knew that unlawful migration of hazardous waste would likely occur if SPMT were to extract

brine from the Mt. Simon Formation after EDS had injected hazardous waste there. SPMT Pet'n at 1-5. SPMT therefore contends that Region V should have delayed issuing the UIC permits to EDS until the Region knew whether SPMT was going to extract brine from the Mt. Simon Formation. Alternatively, SPMT argues that the Region should have conditioned EDS's UIC permits to prohibit waste injection until such time as SPMT's extraction plans are settled. *Id.*; SPMT Reply at 1-5.

b. *Region V and EDS Responses*

In response, Region V and EDS present three similar arguments. First, the Region and EDS each take the position that SPMT's appeal challenges the merits of the RCRA no-migration exemption determination issued to EDS, rather than a UIC permit term or condition, and thus SPMT's appeal in this regard falls outside the scope of review authorized for a UIC permit proceeding. EPA Br. at 22-23, 25; EDS Br. at 10-12. Second, the parties contend that in advocating delay in EDS's authorization to inject waste, SPMT is asking EPA to favor SPMT's interests in the Mt. Simon Formation over EDS's competing interests, and this land use/property rights issue is also outside the narrow scope of review established for UIC permits. EPA Br. at 15; EDS Br. at 17-18. Third, the parties argue that Region V made a reasoned judgment to issue the UIC permits on the basis of all relevant available information, which information was sufficiently accurate and complete to justify going forward with the UIC permits. EPA Br. at 12-14; EDS Br. at 12-13, 15-16. Region V also raises an independent argument that delay is not needed here to protect human health or the environment, as EDS's UIC permits and no-migration exemption determination together ensure adequate health and environment protection. EPA Br. at 12-15. EDS, for its part, urges the Board to rule that a permit process cannot be held open indefinitely, but rather, as a practical matter and in fairness to the permittee, a permit issuer must close the administrative record at some point and make a decision. EDS Br. at 14.

c. *Board Analysis*

SPMT's central argument in this appeal, as summarized above, looks, sounds, and feels like a property dispute. The property in question is, of course, the Mt. Simon Formation, and while one entity – EDS – would like to deposit hazardous waste there, the other – SPMT – would like to extract native brine that is currently resident there. These two potential uses of a single natural resource are, at bottom, profoundly incompatible with each other, and "there's the rub."[7] Both sides would like to find ways to facilitate their own use of the resource and to hinder the other side's use, as whichever party proceeds first will likely (although not certainly) preclude the other party's competing use of the Mt. Simon Formation.

In the pages below, we first review the extent of our jurisdiction to adjudicate claims raised in the UIC permitting context. We then evaluate, pursuant to our jurisdictional reach in these UIC matters, SPMT's property rights claim and underground migration of hazardous contaminants claim. We conclude by examining the timing of UIC permit issuance in this case.

i. *Scope of UIC Permit Review*

On a number of prior occasions, the Board has made clear that its authority to review UIC permit decisions extends to the boundaries of the UIC permitting program itself, with its SDWA-directed focus on the protection of USDWs, and no farther. *See, e.g.*, *In re Am. Soda, L.L.P.*, 9 E.A.D. 280, 286 (EAB 2000) ("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"); *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567 (EAB 1998) ("protection of interests outside of the UIC program [is] beyond our authority to review in the context of [a UIC] case"), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999); *In re Federated Oil & Gas*, 6 E.A.D. 722, 725-26 (EAB 1997). The UIC

[7] William Shakespeare, Hamlet act 3, sc. 1.

program is "oriented exclusively toward the statutory objective of protecting drinking water sources," *In re Brine Disposal Well*, 4 E.A.D. 736, 742 (EAB 1993), and, thus, as Region V and EDS rightly observe, the Board's jurisdiction historically has been limited to evaluation of specific UIC permit terms and the permit issuer's compliance with the SDWA and UIC permit regulations. EPA Br. at 12-15; EDS Br. at 10-12; *see, e.g.*, *In re Puna Geothermal Venture*, 9 E.A.D. 243, 258-59, 274 (EAB 2000); *In re Terra Energy Ltd.*, 4 E.A.D. 159, 161 & n.6 (EAB 1992). When petitioners raise issues outside the scope of the UIC program defined by the SDWA and UIC regulations, the Board has typically denied their requests for UIC permit review on the ground that the Board lacks the authority to adjudicate such issues. *See, e.g.*, *Am. Soda*, 9 E.A.D. at 289-90 (no jurisdiction to review alleged deficiencies in National Environmental Policy Act process); *Federated Oil & Gas*, 6 E.A.D. at 725-26 (no jurisdiction to review contractual rights and obligations created under private lease agreement); *In re Envotech, L.P.*, 6 E.A.D. 260, 275-76 (EAB 1996) (no jurisdiction to review compliance with and adequacy of state-issued remediation plan, regulation of surface facilities, or property rights claims); *Brine Disposal Well*, 4 E.A.D. at 741-43 (no jurisdiction to review claim of subsurface trespass via lateral migration of injected waste brine).

ii. *Competing Property Interests*

Turning to the charges made in this case, we begin with Region V's contention that in advocating delay in EDS's authorization to inject waste, SPMT is essentially asking the Agency to favor SPMT's interests in the Mt. Simon Formation over EDS's competing interests. EPA Br. at 15. In the same vein, EDS points out that "[a]llowing SPMT's potentially conflicting future use to block a UIC permit renewal unnecessarily embroils EPA in decisions regarding land use. Property rights issues are clearly outside the scope of UIC permit review * * *." EDS Br. at 17-18 (citing *Envotech*, 6 E.A.D. at 276; *Brine Disposal Well*, 4 E.A.D. at 741).

In our view, this case concerns one small piece of an elaborate "race" between EDS and SPMT to determine which party will obtain all requisite permits, construct all needed facilities, and begin operations

before the other. It is not the Board's role to choose which of these competing entities goes first; rather, we simply review questions of fact and law that fall within our appellate jurisdiction. As the Region and EDS contend, it is well settled that the Board may not interject itself into disputes over property rights, which are governed by legal precepts other than those contained in the SDWA and UIC regulations. *See*, *e.g.*, *Federated Oil & Gas*, 6 E.A.D. at 724-26 (no jurisdiction to intervene in dispute between property owner and property lessor where lessor obtained UIC permit to operate brine injection well on leased property); *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 23 (EAB 1994) (no jurisdiction to adjudicate UIC permit objections founded on pending litigation of land use conditions imposed by township); *Terra Energy*, 4 E.A.D. at 161 (no jurisdiction to adjudicate claim of adverse effect of brine injection well on neighboring property values). The UIC regulations and EDS's UIC permits explicitly specify that the permits do not "convey any property rights of any sort, or any exclusive privilege." 40 C.F.R. § 144.51(g); *see* UIC Permits pt. I.A.

Accordingly, to the extent that SPMT's position on appeal can be construed as a land use or property rights kind of challenge, the Board lacks jurisdiction to adjudicate it. *In re Suckla Farms, Inc.*, 4 E.A.D. 686, 695 (EAB 1993) ("EPA is simply not the correct forum for litigating contract- or property-law disputes that may happen to arise in the context of waste disposal activity for which a federal permit is required. These disputes properly belong in a court of competent jurisdiction."). SPMT seemed to recognize this at oral argument. *See* Oral Arg. Tr. at 34. We therefore move on to the primary concern in SPMT's appeal – i.e., the underground migration of hazardous contaminants.

iii. *Migration of Contaminants Underground*

(1) *RCRA versus SDWA Migration*

SPMT presents us with a cluster of arguments drawn almost entirely from RCRA statutory language, regulations, and Agency notices relating to the no-migration exemption to Congress' restrictions on the land disposal of hazardous waste. *See* SPMT Pet'n at 1-5 (citing RCRA § 3004, 42 U.S.C. § 6924, 40 C.F.R. part 148, and Region V's no-

migration exemption determinations for EDS and responses to comments thereon); SPMT Reply at 1-5 (same). These arguments strike an odd note, as the "migration" flagged as problematic does not appear to be the kind of migration prohibited by the SDWA UIC program (i.e., movement of contaminant-bearing fluids into USDWs where the contaminants may cause a violation of a primary drinking water standard or otherwise adversely affect the health of persons). *See* 40 C.F.R. §§ 144.1(g), .12(a)-(b), .52(a)(9) (prohibition of injection activities that facilitate movement of contaminants into USDWs). Rather, the migration of concern appears to be migration of hazardous constituents out of EDS's injection zone in violation of the RCRA land disposal restrictions. The two forms of migration are different, and the SDWA and RCRA statutory goals driving the migration proscriptions are distinguishable. The United States Circuit Court of Appeals for the District of Columbia Circuit held this to be the case in disagreeing with a claim that the RCRA no-migration standard and the SDWA drinking water safety standard were identical, explaining:

> SDWA protects sources of drinking water; RCRA protects human health and the environment. SDWA states that underground injection must not endanger drinking water sources; RCRA states that there must be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous; it makes no reference to anything outside the injection zone that might be threatened by such a migration. The statutory texts provide no evidence whatsoever that Congress intended that the RCRA and SDWA standards be identical.

Natural Res. Def. Council, Inc. v. EPA, 907 F.2d 1146, 1157 (D.C. Cir. 1990).

At oral argument, the Board attempted to clarify whether SPMT intended to refer in its arguments to migration in violation of RCRA or the SDWA. Oral Arg. Tr. at 15. SPMT explained that it meant to invoke RCRA but possibly also the SDWA, as the Class I wells in question are within a quarter-mile of a drinking water supply and thus USDWs may

be at risk if EDS is allowed to go forward with hazardous waste injection. *Id*. The Board observed that SPMT's briefs do not mention any threats to USDWs and asked whether SPMT had raised the prospect of such threats in its comments on the draft UIC permits. SPMT admitted that it had not specifically mentioned possible harm to USDWs in its comments or briefs before this Board, but it nonetheless claimed that if migration of EDS's waste occurs, "that which both programs seek to protect * * * may be threatened." *Id*. at 15-16.

Although concern about USDWs could in theory be read into SPMT's broad warnings that unlawful migration from the wells "could endanger human health or the environment," SPMT Pet'n at 4; *see* SPMT Reply at 1-3, the fact is that SPMT has opposed EDS's UIC permits throughout these proceedings solely on the basis of migration in the RCRA sense, not in the SDWA/UIC sense. *See*, *e.g.*, SPMT Ex. A (Letter from John N. Hanson, Beveridge & Diamond, P.C., to Dana Rzeznik, U.S. EPA Region V, UIC Control Branch, *SPMT Comments on Draft UIC Permits for EDS Class I Injection Wells Nos. 1-12 and 2-12*, at 2-5 (July 12, 2004)) [hereinafter SPMT Permit Comments] (arguing that EPA should not renew EDS's UIC permits because they will not ensure compliance with RCRA); SPMT Pet'n at 1-5 (discussing RCRA concepts of "reasonable degree of certainty," "firm belief," "no migration from the injection zone," and "harm to human health and the environment"; arguing that migration "in violation of RCRA" will likely occur); SPMT Reply at 1-5 (same). Given the stakes involved, it surely must not have escaped SPMT's attention that, as part of the UIC permitting process, Region V analyzed EDS's injection wells and determined that there would be no impact to drinking water supplies or the surrounding area as a result of injection into the wells. *See* RTC Doc. at 3, 6, 11-12, 24, 28 (Responses to Comment Nos. 4, 14, 33, 75, 90); *see also* 40 C.F.R. § 146.62(c)(1)-(2) (injection zone must have "sufficient permeability, porosity, thickness and areal extent to prevent migration of fluids into USDWs" and be free of faults and fractures that might allow fluid movement). SPMT, however, did not attempt to rebut the Region's findings in this regard in its comments on the draft UIC permits or in the petition for review filed with this Board, nor did it make any other claims pertaining to USDWs. *See* SPMT Permit Comments at 1-7; SPMT Pet'n at 1-5. SPMT is a sophisticated corporate petitioner with prior

experience before the Board, *see In re Sun Pipe Line Co.*, Order Denying Petitions for Review, UIC Appeal Nos. 02-01 & -02 (EAB July 11, 2002), and we expect that such petitioners would meet our requirement of all petitioners – i.e., to present arguments with sufficient specificity to allow us to ascertain what issues are being raised. *See, e.g.*, *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 495-96 (EAB 2002); *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 235-36 (EAB 2000); *In re Envotech, L.P.*, 6 E.A.D. 260, 267-69 (EAB 1996); *see also* 40 C.F.R. §§ 124.13, .19(a) (reasonably ascertainable arguments must be raised during public comment period, and petitions for review must demonstrate that issues raised on appeal were raised during comment period (or address changes between draft and final permit decisions)). As SPMT failed to present SDWA/UIC-specific argumentation in this case, we will not import it into the claims pending before us.

(2) *Challenge to RCRA No-Migration Exemption*

Parsed through, SPMT's arguments can most logically be understood as raising questions about Region V's decision to issue a RCRA no-migration exemption to EDS for its two injection wells, as the Region and EDS contend in their response briefs. *See* EPA Br. at 22-23; EDS Br. at 10-12. As discussed in Part I.A above, Congress created the no-migration exemption as part of RCRA's restrictions on the land disposal of hazardous waste. The exemption is governed by RCRA § 3004(d)(1), (e)(1), (f)(2), and (g)(5), 42 U.S.C. § 6924(d)(1), (e)(1), (f)(2), and (g)(5), and EPA's implementing regulations at 40 C.F.R. parts 148 and 268.[8] EPA chose to place the injection-specific no-migration

[8] RCRA § 3004(d)(1), (e)(1), and (g)(5) all specify that EPA may not determine a method of land disposal to be protective of human health and the environment unless an "interested person" demonstrates that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. 42 U.S.C. § 6924(d)(1), (e)(1), (g)(5). RCRA § 3004(f)(2) incorporates the same human health and environment protection standard for lawful disposal but omits the no-migration requirement contained in the other three subsections. 42 U.S.C. § 6924(f)(2). In promulgating the part 148 injection-specific disposal regulations, EPA made a policy decision to apply the no-migration standard to disposal under RCRA § 3004(f)(2) as well (continued...)

regulations in part 148, immediately adjacent to the SDWA UIC regulations at 40 C.F.R. parts 144 through 147 (rather than near the other RCRA hazardous waste rules at 40 C.F.R. parts 260-272, or within the land disposal restriction provisions of part 268 itself),[9] and the part 148 rules apply to the same Class I underground injection wells as the UIC rules. However, the part 148 rules are not considered part of the SDWA UIC permitting program. The rules were neither promulgated pursuant to the SDWA, *see* 53 Fed. Reg. 28,118, 28,119-20 (July 26, 1988) (part 148 rules promulgated pursuant to Hazardous and Solid Waste Amendments of 1984), nor incorporated into the SDWA-authorized UIC regulations, as were a number of other, largely administrative RCRA-specific requirements. *See, e.g.*, 40 C.F.R. § 144.14 (enumerating specific RCRA requirements with which wells injecting hazardous wastes must comply); *id*. § 264.1(d) (RCRA standards for owners/operators of hazardous waste treatment, storage, and disposal facilities) ("The requirements of this part apply to a person disposing of hazardous waste by means of underground injection subject to a [UIC] permit * * * only to the extent they are required by § 144.14 of this chapter."); *id*. pt. 146

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[8](...continued)
as under the other three provisions. *See* 53 Fed. Reg. 28,118, 28,120-21 (July 26, 1988). In *Natural Resources Defense Council, Inc. v. EPA*, 907 F.2d 1146 (D.C. Cir. 1990), the U.S. Circuit Court of Appeals for the District of Columbia Circuit upheld the Agency's policy decision in this regard, explaining that to do otherwise would create an anomalous situation in which different hazardous waste disposal activities could be subject to different health/environment protection standards. *Id*. at 1156. The court, like the Agency, thought it "almost foreordained" that the no-migration standard established by Congress would be applied to all hazardous waste disposal activities, including those proceeding in accordance with RCRA § 3004(f)(2). *See id*.; 53 Fed. Reg. at 28,120-21.

[9] As the Agency explained in promulgating the rules governing the deep-well injection method of disposing of hazardous waste:

> Part 148 is similar in approach to [p]art 268. The Agency believes * * * that it is useful to the regulated community and to the [s]tate regulators to have requirements regarding injection wells located in the same portion of the Code of Federal Regulations as are other requirements pertaining to these wells.

53 Fed. Reg. at 28,120.

subpt. G (criteria and standards applicable to Class I hazardous waste injection wells).

Moreover, neither RCRA nor the part 148 regulations (nor the SDWA or UIC rules, for that matter) provide for any kind of administrative review of a no-migration exemption determination.[10] Accordingly, the exemption at issue in this case specifies (as do other such determinations) that there is no administrative review of the decision. *See* 69 Fed. Reg. 15,328, 15,328 (Mar. 25, 2004) ("This decision constitutes a final Agency action. There is no further administrative process to appeal this decision."); *accord, e.g.*, 67 Fed. Reg. 20,971, 20,971 (Apr. 29, 2002) (Vickery Environmental, Inc., Vickery, Ohio); 64 Fed. Reg. 6,650, 6,650 (Feb. 10, 1999) (Waste Management of Ohio, Inc., Oakbrook, Illinois); 62 Fed. Reg. 47,205, 47,205 (Sept. 8, 1997) (Pharmacia & Upjohn, Kalamazoo, Michigan); 55 Fed. Reg. 33,761, 33,761 (Aug. 17, 1990) (E.I. DuPont de Nemours & Co., Louisville, Kentucky); 55 Fed. Reg. 32,293, 32,293 (Aug. 8, 1990) (Bethlehem Steel Corp., Chesterton, Indiana). For all the foregoing reasons, therefore, the Board would not have had jurisdiction to address any concerns about the substance of the RCRA no-migration exemption in this UIC permit proceeding, even if SPMT were seeking such review, which it has said it is not.

At oral argument, the Board pressed this issue by asking SPMT whether a UIC permit would be invalid if a needed no-migration exemption had not yet been granted, or whether, instead, the UIC permit would be valid but not yet effective because one of the many legal authorizations required for an injection well – i.e., the RCRA no-migration exemption – was still outstanding. Oral Arg. Tr. at 13-14. SPMT conceded that a party can indeed hold a valid UIC permit without the RCRA no-migration exemption issue being resolved.[11] *Id.* Notably,

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[10] The 40 C.F.R. part 124 permitting regulations similarly do not appear to provide for administrative review of a RCRA no-migration exemption determination.

[11] SPMT later offered the clarifying, if not contradictory, observation that a party "could have a valid UIC permit without [a no-migration] exemption if the situation (continued...)

such a state of affairs occurred earlier in this very case, as EDS held the original UIC permits for over five years before obtaining the no-migration exemption.[12] The question whether a RCRA no-migration exemption exists or does not exist, therefore, is not relevant in a proceeding to determine the validity of a UIC permit decision. The related question of whether a no-migration exemption itself is valid (and not simply whether it exists or not) – i.e., the substantive question perceived by Region V and EDS in SPMT's arguments – is similarly beyond the scope of Board review in this UIC appeal. SPMT acquiesced in this conclusion at oral argument, conceding several times in that forum that it did not purport to put the merits of the no-migration exemption decision before the Board. *See* Oral Arg. Tr. at 14 (Board: "[T]o the extent that our focus is on the validity of the UIC permit, the existence or nonexistence and, arguably, the validity of the no-migration exemption, would not be before us."; SPMT: "That's correct, Your Honor, and we do not purport to put that before this Board."); *id*. at 32 (Board: "In terms of the migration issue, are you asking us to look at the substance of that issue, or are you only dealing with the relative timing of issuing the UIC permit, vis-a-vis this clarification of what was going to happen with SPMT?"; SPMT: "The latter. We do not question the exemption."). Accordingly, the Board will not decide the question whether Region V properly found EDS had demonstrated, to a reasonable degree of certainty, that there would be no migration of hazardous

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[11](...continued)
didn't threaten migration. We don't have that situation here." Oral Arg. Tr. at 25. This argument seems to be premised on the notion that EDS's UIC permits are simultaneously RCRA permits-by-rule, and thus (presumably) that any perceived RCRA-related deficiencies would invalidate the combined UIC/RCRA permits. This idea of unitary UIC/RCRA permits will be addressed further in the permit-by-rule analysis in Part II.A.2 below.

[12] EDS explained at oral argument that it needed to construct the injection wells first, pursuant to the UIC permits, so that it could then use the wells to collect the data needed to establish, to a reasonable degree of certainty if possible, that hazardous constituents of waste injected into the wells would not migrate out of the injection zone. *See* Oral Arg. Tr. at 62 ("frankly, we [EDS] needed the [injection] well to get the data to do the land disposal restriction [analysis] in the first place"; "we can't do it all together").

constituents from the EDS injection wells for as long as the waste remains hazardous.[13]

iv. *Timing of UIC Permit Issuance*

The real issue then for the Board in SPMT's cluster of no-migration arguments is a question of timing, not substance, as finally became clear at oral argument. *See* Oral Arg. Tr. at 32-33, 35-36, 70-71. SPMT asserts that Region V abused its discretion and acted arbitrarily and capriciously by issuing EDS's UIC permit renewals prematurely, before knowing for certain whether SPMT would need to extract brine from the Mt. Simon Formation and could lawfully do so. According to SPMT, the time needed to answer these two questions is relatively short in comparison to the hundreds or thousands of years the brine resources and minerals in the Mt. Simon Formation will be contaminated if EDS is allowed to inject hazardous waste there, and thus Region V should have waited for this information before allowing EDS's disposal to proceed. *Id*. at 29, 31-32, 36, 70-71; *see* SPMT Permit Comments at 1, 6; SPMT Pet'n at 3.

In its comments on EDS's draft UIC permits, SPMT did not estimate the amount of time it will take to determine, once and for all, whether SPMT will be able to extract brine from the Mt. Simon Formation. Instead, SPMT described the time frame as "soon" and "in the near future." SPMT Permit Comments at 3-4. The same is true of the arguments SPMT raised in its appellate briefs and at oral argument. *See* SPMT Pet'n at 2-5; SPMT Reply at 3-4; Oral Arg. Tr. at 31, 35-36, 71, 76. SPMT announced at oral argument, however, that it had recently

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[13] For purposes of this appeal, we choose to uphold the strict line of demarcation that historically has been observed between UIC and non-UIC (in this case, RCRA no-migration) claims on our jurisdiction. It bears noting, however, that this specific jurisdictional question could be a much closer call in other circumstances, as there is plainly some degree of synergy between the UIC and RCRA no-migration programs. Nevertheless, in cases where, as here, a petitioner expressly states that it is not asking us to examine the substance of a no-migration exemption determination under RCRA and has not properly preserved or presented a UIC migration claim, we need not consider the issue further.

completed its analysis of the Lockport Formation and determined that that Formation is *not* suitable for its brine extraction purposes, and that it therefore will need to use Mt. Simon. Oral Arg. Tr. at 7-8, 23-24, 31-32. Accordingly, the only as-yet unresolved issue for SPMT at this writing is the question of the legality of its brine extraction permit. That question is currently pending before the Michigan Court of Appeals, the second-highest-ranking court in the State of Michigan, and, once decided, could potentially be appealed to the Michigan Supreme Court for further proceedings.

At bottom, the question whether the time involved to determine the legality of SPMT's brine extraction permit is short or long is of no moment to this UIC permit appeal, as the viability of the extraction permit – a State of Michigan natural resources management matter – is simply not germane to the question of UIC permit validity. As a general matter, EPA's part 124 permitting rules set forth an orderly process by which parties may apply for and receive permit decisions under various statutes administered by the Agency, including the SDWA UIC program. *See* 40 C.F.R. pt. 124. While these rules do not establish any absolute deadlines by which UIC permits must be issued or denied, the general understanding is that permit applications will be acted upon in a timely fashion. *See* 40 C.F.R. § 124.3(c), (g) (establishing deadlines for determining whether permit applications are complete and providing for project decision schedules in certain cases); *In re W. Suburban Recycling & Energy Ctr., L.P.*, 6 E.A.D. 692, 708, 711 (EAB 1996) (noting importance of carrying out permit review obligations in timely manner). Indeed, as we observed in *In re Arecibo & Aguadilla Regional Wastewater Treatment Plants*, NPDES Appeal Nos. 02-09 & 03-05, slip op. at 74 n.100 (EAB Mar. 10, 2005), 12 E.A.D. ___, the Administrative Procedure Act ("APA") establishes duties for federal agencies to conclude matters presented to them "within a reasonable time" and to make decisions on applications for federal licenses required by law (which would include UIC permits, *see* APA § 2(e), 5 U.S.C. § 551(8)) "within a reasonable time." APA §§ 6(a), 9(b), 5 U.S.C. §§ 555(b), 558(c). The APA also authorizes the federal courts to "compel agency action unlawfully withheld or unreasonably delayed." APA § 10(e)(1), 5 U.S.C. § 706(1); *see, e.g.*, *Costle v. Pac. Legal Found.*, 445 U.S. 198, 220 n.14 (1980) (noting that City of Los Angeles may obtain judicial

review of prolonged agency inaction on its application for new Clean Water Act permit); *In re Am. Rivers*, 372 F.3d 413, 418-20 (D.C. Cir. 2004) (finding six-year-plus delay in response to petition for Endangered Species Act consultation to be "egregious" and directing agency response in forty-five days).

Of course, a certain amount of delay "is inherent in complex regulatory permitting schemes," such as those implementing federal environmental laws, as such schemes "often require [the compilation and analysis of] detailed information before the issuance of a permit." *Wyatt v. United States*, 271 F.3d 1090, 1098 (Fed. Cir. 2001). Permitting authorities have "an affirmative duty to inquire into and consider all relevant facts" pertaining to the specific statutory and regulatory criteria established for each permit program, and they must ensure they have developed an adequate record upon which to make a reasoned permit decision. *Scenic Hudson Pres. Conference v. Fed. Power Comm'n*, 354 F.2d 608, 620 (2d Cir. 1965); *see also In re Pub. Serv. Co. of N.H.*, 1 E.A.D. 332, 344 (Adm'r 1977) ("[t]he courts have made clear that the Agency must take affirmative steps to obtain the information necessary to [render] sound decisions under the statutes it administers, even at the cost of delay"). This Board, for example, has remanded numerous permitting decisions because the permit issuers failed to expend the time and effort needed to adequately explore and document their analyses of mandatory permitting criteria. *See, e.g., In re Phelps Dodge Corp.*, 10 E.A.D. 460, 522-25 (EAB 2002) (Endangered Species Act critical habitat data); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 414-19 (EAB 1997) (air emissions limits for mercury and thallium); *In re W. Suburban Recycling & Energy Ctr., L.P.*, 6 E.A.D. 692, 710-12 (EAB 1996) (Clean Air Act prevention of significant deterioration data); *In re Envotech, L.P.*, 6 E.A.D. 260, 299-300 (EAB 1996) (UIC waste minimization certification required under 40 C.F.R. § 146.70(d)(1)). "There is 'no *per se* rule as to how long is too long' to wait for agency action, * * * but a reasonable time for agency action is typically counted in weeks and months, not years." *Am. Rivers*, 372 F.3d at 419 (quoting *In re Int'l Chem. Workers Union*, 958 F.2d 1144, 1149 (D.C. Cir. 1992)). "[I]nordinate agency delay would frustrate congressional intent by forcing a breakdown of regulatory processes." *Cutler v. Hayes*, 818 F.2d 879, 897 n.156 (D.C. Cir. 1987).

In the circumstances of this case, we perceive no justification for a delay in the normal processing and issuance of EDS's UIC permits, as sought by SPMT. As the Region points out, it is well established that a permitting authority's inquiry in issuing a UIC permit "'is limited solely to whether the permit applicant has demonstrated that it has complied with the federal regulatory standards for issuance of the permit.'" EPA Br. at 12 (quoting *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 23 (EAB 1994)). Here, EDS submitted extensive amounts of information on the geologic siting, injection well engineering, and operating and monitoring requirements for the two wells, as called for by the SDWA and the UIC regulations. *See*, *e.g.*, EPA Exs. 11-12 (Injection Well Completion Reports (Apr. 2002)). Region V evaluated all of these data in light of UIC program demands and determined that EDS had fulfilled all prerequisites for obtaining renewals of its UIC permits. *See generally* RTC Doc. at 1-37; UIC Permits. SPMT does not contend otherwise, nor does it cite any statutory or regulatory authority or case precedent to support its novel proposition that a permit issuer should defer consideration of a validly submitted UIC permit application on the basis of third-party considerations analogous to those presented here.[14] *See* SPMT Pet'n at 1-5; SPMT Reply at 1-5. When questioned at oral argument on this point, SPMT stated that it was unaware of any cases holding that delay is authorized or appropriate in circumstances of this kind. Oral Arg. Tr. at 76. We are not aware of any such precedents ourselves and thus are unpersuaded that SPMT's arguments in favor of delaying UIC permit issuance or effectiveness have merit. Accordingly, we must deny review of the UIC permits on this ground. *See*, *e.g.*, *Beckman*, 5 E.A.D. at 23 (rejecting argument that UIC permit should not be issued because of pending litigation with township over land use

[14] The Michigan courts could rule on the validity of SPMT's brine extraction permit in as little as several weeks to as much as several years. SPMT has not identified any legitimate reason in the SDWA or UIC program, or elsewhere for that matter, for us to compel Region V to delay its decision to renew EDS's UIC permits until the status of SPMT's brine permit is decided. As EDS argues, this permit process cannot be held open indefinitely; once permit requirements are met, a permit should issue. *See* EDS Br. at 14 (citing *Rybachek v. EPA*, 904 F.2d 1276, 1286 (9th Cir. 1990); *Alaska v. Andrus*, 580 F.2d 465, 474-75 (D.C. Cir.), *vacated in part on other grounds sub nom. W. Oil & Gas Ass'n v. Alaska*, 439 U.S. 922 (1978)).

conditions; holding that "[b]ecause neither the pendency nor the outcome of the litigation implicates the [SDWA/UIC] criteria applied by the Region in issuing a permit to Beckman, [petitioner's] objections founded on the pending litigation are irrelevant to our determination").

2. *RCRA Permits-by-Rule*

a. *Arguments*

Next, we turn to SPMT's permit-by-rule contentions. In comments on the draft UIC permits, SPMT argued that Class I hazardous waste injection permits under the SDWA are also RCRA "permits-by-rule" pursuant to 40 C.F.R. § 270.60(b). SPMT Permit Comments at 2. That regulation specifies that the owner or operator of a Class I injection well that is permitted under the UIC program "shall be deemed to have a RCRA permit" if the owner/operator complies with: (1) corrective action requirements set forth at 40 C.F.R. § 264.101; and (2) information requirements set forth at 40 C.F.R. § 270.14(d), if the UIC well is the only RCRA-regulated unit at the facility. 40 C.F.R. § 270.60(b). SPMT claimed on the basis of this provision that EDS's UIC permits must ensure compliance with all aspects of RCRA, including the land disposal restrictions, which prohibit migration of hazardous waste. SPMT Permit Comments at 2. In responding to SPMT's comments, Region V disagreed with the company, taking the position that a UIC permit is a RCRA permit-by-rule only if the injection well is the sole RCRA-regulated unit at the facility. RTC Doc. at 13 (Response to Comment No. 38). Because EDS's injection wells are not the sole RCRA-regulated units at EDS's facility (EDS must also obtain a RCRA operating permit for its hazardous waste treatment and storage surface facility), Region V concluded that EDS's UIC permits are not also RCRA permits-by-rule. *Id*.

On appeal, SPMT argues that Region V committed a clear error of law in interpreting 40 C.F.R. § 270.60(b)(3). SPMT asserts that in cases where a UIC well is the only RCRA-regulated unit at a facility, section 270.60(b)(3) simply requires the well owner/operator to comply with the information requirements found at section 270.14(d), not that such situations (i.e., UIC well as only RCRA-regulated unit) are the only

ones in which a RCRA permit-by-rule may be deemed to exist. SPMT Br. at 9-10. SPMT argues that the Region's response to its comments in this regard reflects a fundamental misunderstanding of the notion that EDS's UIC permits must comply with all aspects of RCRA and reveals that the Region failed to make an informed decision on whether to renew the UIC permits. *Id*. at 10.

Region V replies by admitting that its response to SPMT's comments "did not clearly describe the relationship between UIC permits and RCRA permits-by-rule." EPA Br. at 23-24. However, the Region argues that "any imprecision in that response should be deemed harmless error" because its characterization of the permits "does not affect the permits' legal status under RCRA or the parties' legal rights and, therefore, does not warrant review by the Board." *Id*. at 24. Moreover, Region V points out that, contrary to SPMT's belief, a facility must do more than simply obtain a UIC permit to be considered as also having secured a RCRA permit-by-rule. The Region explains that under the regulations, in cases where, as here, a facility has RCRA-permitted hazardous waste management units other than an injection well, the UIC permit will not operate as a RCRA permit-by-rule until the RCRA permit for those other units is in place and the permittee complies with the corrective action requirements set out in that RCRA permit pursuant to 40 C.F.R. § 264.101. EPA Br. at 24.

For its part, EDS similarly concedes that Region V's response to SPMT's comments on this point was "perhaps somewhat inartfully drafted." EDS Br. at 23 n.17. However, EDS characterizes the Region's response as "refer[ring] to EPA's general policy that a UIC permit will act as the sole permit at a facility (through the permit by rule provision) only when the UIC well itself is the only RCRA regulated unit on site. Otherwise, EPA acknowledges that while the UIC permit may qualify as a RCRA permit-by-rule, another hazardous waste license will still be needed for the facility." *Id*. EDS concludes that "[b]ecause EDS also has to obtain a hazardous waste license for other treatment and storage units on site, it would make little sense to duplicate provisions in those licenses in EDS's UIC permits." *Id*.

b. *Analysis*

Under the statutory scheme designed by Congress, hazardous waste injection wells "must have authorization to operate under both SDWA and RCRA." 52 Fed. Reg. 45,788, 45,791 (Dec. 1, 1987); *see* SDWA §§ 1421(b)(1)(A), 1421(c), 1422(c), 42 U.S.C. §§ 300h(b)(1)(A), 300h(c), 300h-1(c); RCRA § 3005, 42 U.S.C. § 6925; *see also* 40 C.F.R. § 270.1(c)(1)(i) (RCRA permits are required for hazardous waste injection wells). Congress expressly specified that regulations implementing the SDWA UIC program may permit underground injection by rule. SDWA §§ 1421(b)(1)(A)-(B), 1422(c), 42 U.S.C. §§ 300h(b)(1)(A)-(B), 300h-1(c). A similarly specific permit-by-rule provision does not appear in RCRA. However, Congress instructed EPA to prescribe regulations necessary to implement that statute, RCRA § 2002(a), 42 U.S.C. § 6912(a), and in promulgating such regulations, EPA included 40 C.F.R. § 270.60(b), a RCRA permit-by-rule provision for injection wells. This was done in an attempt to fulfill the congressional directive to "avoid duplication, to the maximum extent practicable," between RCRA and SDWA injection well requirements. RCRA § 1006(b)(1), 42 U.S.C. § 6905(b)(1); *see* 45 Fed. Reg. 33,290, 33,326 (May 19, 1980) ("EPA sought to set clear jurisdictional boundaries for the two programs so that each would regulate the practices it was specifically designed to control, and duplication could be eliminated"). The EPA Administrator explained section 270.60(b) in a prior case as follows:

> Under [EPA's] regulations, wells used to dispose of hazardous waste are subject to regulation under both the UIC and RCRA programs. To streamline paperwork requirements, EPA allows a UIC permittee to qualify for a RCRA permit-by-rule, rather than undergoing the formal RCRA application process. *See* 40 C.F.R. § 270.60(b); 45 Fed. Reg. 33,335 (May 19, 1980). For UIC permits for Class I hazardous waste wells issued after November 8, 1984 (the date RCRA § 3004(u) was

> added), one condition for obtaining a RCRA permit-by-rule is compliance with the corrective action requirements of RCRA § 3004(u). *See* 40 C.F.R. § 270.60(b)(3).

In re Bethlehem Steel Corp., 2 E.A.D. 715, 719 (Adm'r 1989), *aff'd sub nom. Inland Steel Co. v. EPA*, 901 F.2d 1419 (7th Cir. 1990); *see also Natural Res. Def. Council, Inc. v. EPA*, 907 F.2d 1146, 1165 (D.C. Cir. 1990) ("[n]othing prevents [EPA] from integrating the underground injection well and RCRA procedures so as to avoid needless duplication").

Once all the requirements set forth in 40 C.F.R. § 270.60(b) are fulfilled, RCRA permit-by-rule status is automatic. 52 Fed. Reg. at 45,791. Care must be taken with terminology in this context, however. It is inappropriate to refer to a UIC permit as "becoming" a RCRA permit or as "being transformed into" a "combined" UIC/RCRA permit, wherein the UIC permit is expanded to include specific RCRA provisions. Instead, possession of a UIC permit and fulfillment of all the section 270.60(b) conditions are simply predicates for the permit-by-rule regulation itself to serve as the RCRA permit, as it were. *See* Oral Arg. Tr. at 55-57. In other words, "[t]he Agency issues RCRA permits-by-rule by operation of its regulations," *Bethlehem Steel*, 2 E.A.D. at 723, meaning the UIC permit remains merely a UIC permit and does not become a RCRA permit. As Region V properly explained at oral argument, "When you have a permit by rule, the EPA has made the decision in its regulations that the standards that a permittee must meet to receive a UIC permit are sufficiently protective of the things that RCRA also protects that the UIC permit acts in the place of a RCRA permit, so that the UIC permit is not required to include all the RCRA requirements * * *."[15] *Id.* at 57.

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[15] This statement is supported by the Agency preamble SPMT cited at oral argument, *see* Oral Arg. Tr. at 70, which begins by explaining that "[w]hen a final UIC permit is issued to a UIC hazardous waste injection well, the well will become subject to the general RCRA permit by rule." 45 Fed. Reg. 33,290, 33,326 (May 19, 1980). The preamble goes on to note that UIC permit requirements incorporate many of the (continued...)

i. *Board Lacks Jurisdiction*

As a procedural matter, the questions of whether and how injection wells must comply with RCRA requirements generally fall outside of Board jurisdiction in a UIC permit proceeding. *See supra* Part II.A.1.c (holding that Board review in UIC permit cases is limited to evaluating permit issuer compliance with the SDWA and UIC program regulations). Several exceptions exist to this rule, as a number of UIC program regulations implement specific RCRA provisions in addition to or in place of SDWA provisions. For example, one UIC regulation (i.e., 40 C.F.R. § 144.14) lists specific RCRA requirements with which UIC well owners/operators must comply, while subpart G of 40 C.F.R. § 146 sets forth technical criteria and standards for Class I hazardous waste injection wells that reflect RCRA specifications. The Board plainly has jurisdiction to review permit conditions or denials relating to these RCRA requirements, which are explicitly incorporated into the SDWA/UIC program itself.

However, the question whether a particular UIC permit decision triggers RCRA permit-by-rule status is not one the Board would have jurisdiction to entertain in a UIC proceeding, as the question does not turn on an interpretation or application of the SDWA or UIC regulations. Instead, the permit-by-rule provision at issue in this case is found solely in the RCRA regulations at 40 C.F.R. § 270.60(b). RCRA-only

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[15](...continued)
requirements of analogous RCRA regulations and that other RCRA requirements "are modified [in the UIC permit rules] so as to fit wells, or are not applicable to wells." *Id.* The preamble concludes:

> The resulting regulatory scheme provides, in EPA's view, a degree of control [that] is equivalent to that which would be obtained if the facilities were required to obtain individual permits under RCRA. * * * Thus, nothing would be gained by dual permitting, and a permit by rule carries out the purpose of § 1006(b) of RCRA, which obligates EPA to "avoid duplication, to the maximum extent practical, with the appropriate provisions of * * * [the] Safe Drinking Water Act" * * *.

Id.

regulatory requirements, of course, are not UIC requirements. The issue speaks to the permittee's status under RCRA, not the SDWA. Accordingly, for the reasons set forth in Part II.A.1.c above, we lack jurisdiction to adjudicate this matter.

ii. *Merits*

(1) *EDS Has Not Yet Fulfilled All the RCRA Permit-by-Rule Requirements*

Even if the Board did have jurisdiction to consider SPMT's RCRA permit-by-rule arguments in this UIC proceeding, SPMT's arguments still fail, in this case on the merits. As Region V argues, a facility must do more than simply obtain a UIC permit to be considered as also having a RCRA permit-by-rule. *See* 52 Fed. Reg. 45,788, 45,791-92 (Dec. 1, 1987) (describing amendments made to UIC and RCRA regulations to implement Hazardous and Solid Waste Amendments of 1984 and noting that "a facility must now do more than obtain a UIC permit to obtain a RCRA permit-by-rule"). If the facility has other RCRA-regulated components, as EDS does, the facility will not be deemed to have a RCRA permit-by-rule until the RCRA permit for the other components is issued and the permittee complies with corrective action requirements included in that permit for the other components and the UIC-permitted injection wells, as set forth in 40 C.F.R. § 264.101.[16] *See* 40 C.F.R. § 270.60(b)(3)(i). EPA explained the situation that exists where injection wells are not the only RCRA-regulated units at a facility, as follows:

[16] "Compliance with" corrective action requirements is achieved, for purposes of 40 C.F.R. § 270.60(b)(3), by including in a permit specific schedules of compliance for corrective action that cannot be completed prior to issuance of the permit, as well as assurances of financial responsibility for completing such corrective action. *E.g.*, 40 C.F.R. § 264.101(b).

> [M]any injection wells with RCRA interim status[17] are located at interim status facilities [that] have another unit or units that are subject to RCRA permitting (e.g., hazardous waste storage tanks). For these facilities, as for all facilities [that] inject hazardous waste, EPA intends to review potential releases from the injection well as part of the UIC permitting process (under SDWA authorities, and, if necessary, RCRA section 3008(h)). However, implementation of substantive [corrective action] requirements of [RCRA] section 3004(u) for the well and all [solid waste management units] at the facility will be addressed through the first RCRA permit issued to the other hazardous waste unit(s) at the facility. Once the RCRA permit for the other unit(s) has been issued, the injection well would automatically obtain its permit-by-rule by fulfilling the corrective action requirements of § 270.60(b), provided that the other requirements of § 270.60(b) have been met.

52 Fed. Reg. at 45,791.

In its appeal, SPMT does not allege that EDS possessed all requisite RCRA permits for its waste treatment, storage, and disposal facilities or that it had complied with the corrective action requirements of 40 C.F.R. § 264.101 at the time the UIC permits were issued. SPMT could not in fact reasonably allege these things because, as mentioned above, at the time of UIC permit issuance (and indeed, at least as late as the oral argument), MDEQ had not yet issued to EDS the RCRA operating permit for the hazardous waste treatment and storage facility on the surface of the site. *See* Oral Arg. Tr. at 66-67. That operating permit will contain the corrective action requirements that EDS must comply with before being deemed to have a RCRA permit-by-rule for its injection wells. 52 Fed. Reg. at 45,791. Accordingly, since EDS had not

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[17] *See supra* note 4 and accompanying text (discussing RCRA authorization through "interim status" mechanism).

yet satisfied the preconditions for a RCRA permit-by-rule as of the date of UIC permit issuance, we would have rejected SPMT's arguments based on the effect of a permit-by-rule even if we had jurisdiction to review those arguments.[18]

(2) *Harmless Error*

Finally, we turn to the legal error Region V allegedly committed in construing 40 C.F.R. § 270.60(b)(3) while responding to SPMT's comments. Upon review of those comments, we find that the primary point made therein on this topic is that EDS's UIC permits – RCRA permits-by-rule in SPMT's view – "are intended to provide the same protections as RCRA" and "must insure compliance with all aspects of RCRA, including the land disposal restrictions [that] prohibit migration of injected hazardous wastes." SPMT Permit Comments at 2. According to SPMT, EDS's UIC permits should incorporate the RCRA no-migration exemption conditions to ensure compliance with RCRA. *Id*.

In its response, Region V paraphrased these comments as "UIC permits are also RCRA permits, and the proposed permits do not ensure compliance with RCRA." RTC Doc. at 13 (Response to Comment No. 38). The Region then replied as follows:

> EPA disagrees. UIC permits are mandated by regulations promulgated under SDWA. The UIC permits contain RCRA provisions only to the extent that they affect the operation of the wells. A UIC permit is also a RCRA permit by rule only if the injection well is the sole RCRA regulated unit at the facility, which is not the case at EDS. EDS also must obtain a license from MDEQ for operation of its hazardous waste treatment, storage, and disposal facility under Michigan's

[18] Furthermore, we note that permits-by-rule are not appealable to the Board under the part 124 permitting regulations. *See* 40 C.F.R. § 124.1(a).

> authorized RCRA requirements and must comply with those State RCRA requirements.

Id.

Region V's response is inaccurate to the extent that it can be read as stating that an injection well can obtain a permit-by-rule only if it is the sole RCRA-regulated unit at the facility. However, more importantly, the response reveals that the Region considered SPMT's main point (i.e., that UIC permits are also allegedly RCRA permits and must ensure compliance with RCRA) and disagreed with it, explaining the Agency's contrary view that UIC permits are *not* the same as RCRA permits and are *not* meant to duplicate all aspects of the RCRA program.

On appeal, Region V admitted that in responding to SPMT's comments, it failed to describe clearly the relationship between UIC permits and RCRA permits-by-rule. As noted above, the relationship is subtle and layered, so such a failure is not entirely surprising. However, the Region's response did address, and in our view address correctly, the main point of SPMT's comment, rejecting the assertion that the UIC permit must ensure compliance with *all* RCRA requirements. For that reason, Region V provided a response that is sufficient to fulfill its obligation to "[b]riefly describe and respond to all significant comments on the draft permit," 40 C.F.R. § 124.17(a)(2), as the Region unquestionably considered the gist of SPMT's ideas and rejected them. Any error in Region V's response is therefore inconsequential and harmless. *See, e.g., In re Steel Dynamics, Inc.*, 9 E.A.D. 740, 749 (EAB 2001) (while potential to emit should be based on worst-case calculation, permit issuer's use of best-case emission rates is harmless error where other legitimate bases for permit issuer's decision exist); *In re Hadson Power 14–Buena Vista*, 4 E.A.D. 258, 278-86 (EAB 1992) (discussing harmless error finding in *In re Old Dominion Elec. Coop.*, 3 E.A.D. 779, 780-82 (Adm'r 1992) (reliance on invalid reasoning is harmless error where permit issuer also relied on other reasonable grounds for decision)). Review of the UIC permits is denied on this ground.

3. *Failure to Include RCRA No-Migration Condition No. 9 in UIC Permits*

Next, SPMT argues that Region V erroneously failed to incorporate Condition No. 9 of the RCRA no-migration exemption into the UIC permits. SPMT Pet'n at 10-12. Condition No. 9 provides for automatic termination of the no-migration exemption, as follows:

> In the event that a brine extraction well is drilled within the [area of review] into the injection zone, penetrated by well #2-12 at a depth of 3,369 feet, and is used for extraction from any strata within the injection zone, the exemption will terminate. In order to resume injection, EDS must prepare a new demonstration of no migration including consideration of the extraction activity, and a new exemption must be issued by the EPA.

69 Fed. Reg. 15,328, 15,342 (Mar. 25, 2004). By contrast, the UIC permits require that "[u]pon written notification from the Director [of EPA Region V's Water Division] that an exemption granted under 40 C.F.R. § 148.20 [i.e., a RCRA no-migration exemption] has been terminated, the permittee shall immediately cease injection of all prohibited hazardous wastes." UIC Permits pt. I.K.5, at 16. SPMT believes this permit language conflicts with Condition No. 9, which requires immediate cessation of waste injection regardless of whether EPA issues written notification to EDS. *See* SPMT Permit Comments at 5. Thus, SPMT urges the Board to remand the UIC permits so they can be modified to include Condition No. 9 and to ensure compliance with RCRA, or denied outright.[19] SPMT Pet'n at 11-12.

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[19] SPMT also argues that Region V wrongly represented that "changes to the waste analysis plan, the injection rate and pressure, the plugging plan, and limitations on the injection of certain types of waste" in the final UIC permits make those permits consistent with the RCRA no-migration exemption. SPMT Pet'n at 10-11. SPMT purports to "contest" the permit conditions incorporating these changes, *id*. at 15, but the company fails to develop its position in this regard with any supporting argumentation or documentation. We therefore need not consider these allegations further. *See* (continued...)

Region V counters by explaining that it commonly includes technical conditions of no-migration exemption decisions (e.g., maximum injection rate/pressure, maximum contaminant concentration) in UIC permits for ease of enforcement. EPA Br. at 16 (citing EPA, *Incorporation of UIC "No Migration" Petition Conditions into Class I Hazardous Waste Injection Well Permits; Underground Injection Control Program Guidance No. 73* (Jan. 30, 1991)). The Agency routinely excludes, however, duration or validity conditions of exemption decisions from UIC permits, such as Condition No. 9 of the EDS exemption, and also Conditions No. 7 and 8, which provide that the exemption will persist only as long as the underlying assumptions are valid or for twenty years maximum, respectively. *Id*. (citing 69 Fed. Reg. at 15,342). Region V acknowledges that UIC permits and no-migration exemptions act together to govern injection wells, but it emphasizes that the permits and exemptions are separate and distinct legal instruments that are governed by different standards and criteria. *Id*. For example, the Region notes that under the permitting regulations, a UIC permit can be terminated for noncompliance with permit conditions, failure to disclose or misrepresentation of underlying facts, or endangerment to human health or the environment. *Id*. (citing 40 C.F.R. §§ 124.5, 144.40(a)); *see* UIC Permits pt. I.B.1, at 2-3. In this case, the Region observes, the no-migration exemption will automatically terminate upon SPMT's extraction of brine from the Mt. Simon Formation, and EDS must cease injection upon written notification of the termination. Region V contends that no additional health or environment protections would be gained by including the automatic termination provision in the UIC permits, and thus the Board should reject SPMT's charges. EPA Br. at 17.

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[19](...continued)
40 C.F.R. § 124.19(a) (petition for review must include statement of reasons supporting review, along with showing that permit condition in question is based on finding of fact or conclusion of law that is clearly erroneous, or exercise of discretion or policy consideration that Board should review); *see, e.g.*, *In re Envotech, L.P.*, 6 E.A.D. 260, 267-69 (EAB 1996) (dismissing petition for review of UIC permits for lack of specific argumentation regarding purported errors in permit issuer's permitting analysis).

EDS responds to the petition for review by pointing out that, contrary to SPMT's understanding, Condition No. 9 is, in fact, already incorporated into the UIC permits by reference. According to EDS, the permits specify that the company can only inject hazardous wastes if the no-migration exemption is in effect and all conditions of the exemption – including Condition No. 9 – are met. EDS Br. at 24 (citing UIC Permits pt. I.K.1.b, at 16). EDS argues that Region V has gone beyond what is legally required to ensure the UIC permits incorporate part 148 requirements and thus remand is not warranted on this ground. *Id*. (citing UIC Permits pts. K.1, .3-.6, at 15-17). At oral argument, SPMT acknowledged EDS's position in this regard, stating, "EDS makes a good point that the Condition 9 of the Exemption is incorporated by reference into the UIC permit." Oral Arg. Tr. at 20.

In our view, SPMT has failed to identify any legal requirement directing the inclusion of Condition No. 9 in the UIC permits. In any event, we think this issue is essentially moot, in that EDS is generally correct that the no-migration exemption conditions are already integrated into the UIC permits. While the meaning of the permit language delineating this point is obscured to a certain extent by the language's complexity, the practical effect is as EDS suggests. The permits state:

> Further Requirements – The permittee shall comply with all regulations set forth under 40 C.F.R. Part 148. The permittee may continue to inject the restricted hazardous wastes specified in Part III(E) of this permit as long as it meets all other requirements of this permit and applicable regulations and at least one of the following remains in effect:
>
> (a) an extension of the effective date of a prohibition has been granted pursuant to 40 C.F.R. § 148.4 with respect to such waste;
> (b) *the exemption granted in response to a petition filed under 40 C.F.R. § 148.20 to allow injection of restricted wastes, with respect to those wastes and wells covered by the*

> *exemption, remains in effect, and all conditions of the exemption are met*;
>
> (c) land disposal ban dates have not been promulgated for the hazardous constituents of the wastestream; or
>
> (d) the concentration of hazardous constituents in each RCRA hazardous waste are below the treatment standards for each specific RCRA waste code found at 40 C.F.R. § 268.43 – Table CCW.

UIC Permits pt. I.K.1(a)-(d), at 15-16 (emphasis added).

The foregoing provision is conditional – i.e., EDS may continue injecting hazardous waste *only if* it meets all its UIC permit conditions *and if at least one of the four provisions* quoted above remains in effect. Of the four permit conditions listed above, only condition I.K.1(b) (i.e., the italicized condition) presents a situation in which a no-migration exemption has been issued and must be maintained through compliance with the exemption conditions established pursuant to 40 C.F.R. § 148. The other three conditions (i.e., (a), (c), and (d)) all involve situations in which a no-migration exemption is not necessary. For instance, for conditions I.K.1(a) and (c) of the UIC permits, the waste or hazardous constituents of the waste in question are not yet subject to the RCRA land disposal restrictions, so any no-migration exemption held by the permittee would not apply with respect to these wastes/waste constituents. For condition I.K.1(d) of the UIC permits, the waste involved falls within the pretreatment exemption to the RCRA land disposal restrictions (i.e., waste is treated or exists at a level low enough to minimize the short- and long-term threats to human health and the environment) and thus may be land-disposed without a no-migration exemption. *See supra* Part I.A (citing RCRA § 3004(m), 42 U.S.C. § 6924(m)). Accordingly, while it might appear, in theory at least, that one of the permit conditions listed above *other than* condition I.K.1(b) could remain in effect and thus authorize continued hazardous waste injection by EDS even if the no-migration exemption were not in effect, in practice this will not happen. EDS may satisfy this permit term only

by operating pursuant to a no-migration exemption, so if such an exemption is not in effect, EDS may not inject.

Thus, when the extraneous (for purposes of this analysis) language is excluded, the UIC permits condition EDS's continued injection on EDS having an exemption "in effect" and on its meeting (i.e., complying with) "all conditions" of that exemption. This appears, therefore, to integrate the essence of Condition No. 9, the automatic no-migration exemption termination clause that SPMT asserted conflicts with the UIC permits' termination provision, into the UIC permits. In light of this, the practical effect of more explicitly incorporating Condition No. 9 into the UIC permits would be nil.[20] SPMT has not identified any clear error or Agency policy or exercise of discretion that warrants review in this context. Review of the UIC permits is denied on this ground.[21]

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[20] At oral argument, EDS expressed its understanding that all the conditions of the RCRA no-migration exemption apply to it regardless of whether it has a UIC permit. EDS's counsel stated:

> We don't need to be given notice that the exemption is violated; the exemption applies to us whether we have a [UIC] permit or not. The exemption applies to me. I can't go out and put hazardous waste on the ground and be able to get away with it because there's not some permit telling me I can't do that. The land disposal restrictions are their own regulatory and statutory requirements, so, absolutely, the exemption applies. We don't need to wait for notice to tell us that. We have to abide by all the requirements that are applicable to us.

Oral Arg. Tr. at 67-68.

[21] Our finding that the no-migration exemption conditions are effectively integrated into EDS's UIC permits does not equate to a finding that the exemption decision itself is incorporated by reference and thus subject to Board jurisdiction to review UIC permit appeals. No argument as to the effect of condition I.K.1 of the permits has been raised along these lines, and we will not undertake such analysis on our own motion.

4. *Region V's Response to Comments*

Next, SPMT contends that Region V failed to respond to several comments it submitted on the draft UIC permits. SPMT Pet'n at 5-8, 12-13. The comments in question addressed: (1) the impacts of the UIC permits on SPMT's property interests; (2) the inability of the UIC permits' termination provisions to prevent vertical migration of brine contaminated with hazardous wastes; (3) the alleged premature issuing of the UIC permits before EDS has obtained a RCRA operating permit from the State of Michigan; and (4) the lack of inclusion in the UIC permits of the conditions of the RCRA no-migration exemption. *See id.*; SPMT Permit Comments at 4-7. SPMT believes the Region's purported failure to respond to these comments rendered the administrative record incomplete and constitutes clear error warranting a remand of the permits. SPMT Pet'n at 5, 7-8, 13.

Region V and EDS deny that the Region failed to respond to SPMT's comments. They counter SPMT's claims with a point-by-point recitation of page and comment/response numbers taken from the Region's response-to-comments document where, they claim, Region V considered and answered each argument SPMT identifies as having been ignored. *See* EPA Br. at 18-21 (citing RTC Doc. at 7-8, 13, 15, 17 (Responses to Comment Nos. 20, 39, 46, 54)); EDS Br. at 19-22 (citing RTC Doc. at 3-4, 7-8, 12-15, 17-19 (Responses to Comment Nos. 7, 20, 35, 39, 43, 51-52, 54, 58)). In so doing, the Region and EDS contend that permitting authorities are not required to respond in exhaustive detail to every discrete comment raised on a draft permit. Instead, they note, permit issuers are obliged to "briefly describe and respond to all significant comments," 40 C.F.R. § 124.17(a)(2), and they may group related comments together and provide unified responses to those comments. EPA Br. at 19, 21 n.8 (citing *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 583 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999)); EDS Br. at 18 (citing *In re Hillman Power Co., L.L.C.*, 10 E.A.D. 673, 696 n.20 (EAB 2002)). Region V and EDS claim that as long as a permit issuer "'succinctly'" addresses the "'essence'" of each issue, the response will be deemed to be consistent with the part 124 permitting rules. EPA Br. at 19 (quoting

NE Hub, 7 E.A.D. at 583); EDS Br. at 18 (same). The Region and EDS believe Region V properly achieved that standard in this case.

Upon review of the comments and responses flagged by the parties, we find no merit in SPMT's arguments. In each of the instances in which a failure to respond is alleged, we find ample evidence that the Region heard and evaluated SPMT's concerns. *See, e.g.*, RTC Doc. at 3-4, 7-8, 14-15, 17-18 (Responses to Comment Nos. 7, 20, 43, 54) (property issues); *id*. at 3-4, 7-8 (Responses to Comment Nos. 7, 20) (migration of contaminated brine (which technically is a subset of the property rights claims, *see* SPMT Permit Comments at 6)); RTC Doc. at 12, 15-16 (Responses to Comment Nos. 35, 46) (unobtained RCRA operating permit); RTC Doc. at 13, 17-19 (Responses to Comment Nos. 39, 52, 58) (no-migration exemption conditions). Region V readily admits that it combined and paraphrased similar comments in its response-to-comments document, EPA Br. at 19, and as a result some of the specific nuances of SPMT's comments do not appear on the face of the response-to-comments document. The Region's treatment of SPMT's comments is nonetheless acceptable, however, as permitting authorities are neither expected nor required to respond on an individualized basis to every single discrete comment and subcomment submitted on a permit, in the same length and level of detail as the comment or subcomment itself. *In re Wash. Aqueduct Water Supply Sys.*, NPDES Appeal No. 03-06, slip op. at 28-29 (EAB July 29, 2004), 11 E.A.D. ___; *Hillman*, 10 E.A.D. at 696 n.20; *NE Hub*, 7 E.A.D. at 583. Instead, succinct responses answering significant comments are adequate in this context, 40 C.F.R. § 124.17(a)(2), so long as those responses, though brief, give "thoughtful and full consideration" to public comments, *In re RockGen Energy Ctr.*, 8 E.A.D. 536, 557 (EAB 1999), and are "clear and thorough enough to adequately encompass the issues raised." *Wash. Aqueduct*, slip op. at 28, 11 E.A.D. ___. SPMT has not persuaded us that Region V did not provide this level of meaningful consideration in the instant case. The fact that SPMT might not agree with the Region's conclusions is not material to our decision in this regard. *E.g.*, *NE Hub*, 7 E.A.D. at 583. Therefore, review is denied on this ground.

5. *Security Measures*

Finally, SPMT argues that Region V erred by failing to include conditions in the UIC permits requiring EDS to take precautions to minimize the threat of terrorist acts and sabotage of its hazardous waste operations. SPMT Pet'n at 14. SPMT criticizes the Region's response to comments on this issue, claiming that the Region is in a position to ensure the implementation of security measures by well operators. *Id*. Region V replies that neither the SDWA nor the UIC regulations direct it to incorporate security measures in UIC permits and points out that, instead, security measures for hazardous waste facilities are set forth in RCRA regulations at 40 C.F.R. § 264.14. EPA Br. at 17-18. The Region notes that the State of Michigan is authorized to implement the security provisions for the EDS facility and argues that there is no need for the Agency to duplicate such efforts in the UIC permitting process. *Id*.; *see* EDS Br. at 26.

SPMT's arguments on this issue lack merit. SPMT has failed to identify any SDWA or UIC program provision that directs permit issuers to incorporate anti-terrorism or other security measures in UIC permits. As Region V explained, security requirements are set forth in the RCRA regulations at 40 C.F.R. § 264.14, and these requirements are implemented in the State of Michigan pursuant to Rule 299.9605(1) of the Michigan Administrative Code. SPMT has offered no legitimate basis for us to find, in light of these facts, that "as a matter of good policy" duplicative security measures should be included in UIC permits.

Moreover, as Region V stated in its response to comments on the draft permits:

> EPA regulations at 40 C.F.R. [p]arts 144 and 146 state the requirements and standards that a permit applicant must meet to have a UIC permit application approved. These regulations deal primarily with the geologic siting, well engineering, operating, and monitoring standards for deep injection wells. Proximity to airports and highways is not addressed by the UIC regulations. In the event of an accident or sabotage, however, the

> UIC permits for the EDS wells require continuous monitoring of the injection wells, alarm systems and automatic shut-down mechanisms under 40 C.F.R. [p]art 146. This permit decision, however, is not the appropriate forum for larger questions on potential response to terrorism.

RTC Doc. at 11 (Response to Comment No. 31). We agree with the Region and are unpersuaded that it must exercise its policy discretion to condition the permits to address these matters. *See, e.g.*, *In re City of Port St. Joe*, 7 E.A.D. 275, 286 (EAB 1997) ("A permit appeal proceeding is not the appropriate forum in which to challenge either the validity of Agency regulations or the policy judgments that underlie them."); *In re Envotech, L.P.*, 6 E.A.D. 260, 269-71 (EAB 1996) (challenge to policy judgments underlying SDWA and UIC program not appropriately before Board); *In re Suckla Farms, Inc.*, 4 E.A.D. 686, 698-700 (EAB 1993). Review is denied on this ground.

6. *Conclusion on SPMT Petition*

For the foregoing reasons, we deny all components of SPMT's petition for review of UIC Permit Nos. MI-163-1W-C007 and MI-163-1W-C008.

B. *Alfred Brock Appeal*

Turning to Mr. Alfred Brock's appeal, we find that Mr. Brock has raised sixteen sets of arguments in his petition for review.[22] For purposes of analysis, we have organized the arguments into five categories, as follows: (1) challenges to technical or scientific judgments made by Region V (Mr. Brock's Item Nos. 3, 4, 6, 8, 17); (2) challenges raised for the first time on appeal (Item Nos. 1, 6, 15, 16); (3) challenges to matters that are governed by state or local law or federal law other than

[22] Mr. Brock's petition labels his arguments "Item Nos. 1-17" but omits Item No. 5, thus leaving only sixteen sets of arguments for us to consider. *See* Brock Pet'n at 1-5.

the SDWA/UIC program (Item Nos. 1, 2, 7, 14, 15); (4) challenges that do not qualify as objections to a permit condition or Region V's compliance with the SDWA and UIC program (Item Nos. 6, 9, 10, 12, 13, 15); and (5) challenges that allege failure to respond adequately to comments (Item No. 11). We will examine each category in turn.

1. *Technical Issues*

First, we begin with Mr. Brock's technical challenges. At the outset, we note that in part 124 permit appeals such as this one, it is well settled that petitioners seeking review of technical issues have a heavy burden of proof to establish clear error or another basis for a grant of review. In the absence of specific, detailed evidence to the contrary, the Board will generally defer to a permitting agency's determinations that involve application of the agency's technical or scientific expertise. *See, e.g.*, *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 201, 215 (EAB 2000); *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567-68 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 403 (EAB 1997). Our analysis of technical matters proceeds according to the following model:

> [W]hen presented with technical issues, we look to determine whether the record demonstrates that the [permit issuer] duly considered the issues raised in the comments and whether the approach ultimately adopted by the [permit issuer] is rational in light of all the information in the record. If we are satisfied that the [permit issuer] gave due consideration to comments received and adopted an approach in the final permit decision that is rational and supportable, we typically will defer to the [permit issuer's] position. Clear error or reviewable exercise of discretion are not established simply because the petitioner presents a different opinion or alternative theory regarding a technical matter, particularly when the alternative theory is unsubstantiated.

In re MCN Oil & Gas Co., Order Denying Review, UIC Appeal No. 02-03, slip op. at 25-26 n.21 (EAB Sept. 4, 2002) (citations omitted), *quoted in In re Wash. Aqueduct Water Supply Sys.*, NPDES Appeal No. 03-06, slip op. at 12 (EAB July 29, 2004), 11 E.A.D. ___; *accord In re Three Mountain Power, L.L.C.*, 10 E.A.D. 39, 50-52 (EAB 2001); *Steel Dynamics*, 9 E.A.D. at 180 n.16, 201.

In this case, Mr. Brock questions the Region's assessment of: (1) threats posed to the Great Lakes by EDS's wells (Item No. 3); (2) the possibility that the injection wells may cause earthquakes and other geological disturbances (Item No. 4); (3) deep well injection as a safe and proven technology (Item No. 6); (4) damage to drinking water supplies in the area of the wells (Item No. 8); and (5) Darcian and non-Darcian flow of injected wastes through the Mt. Simon Formation (Item No. 17).[23] Brock Pet'n at 2-5. In each of these five instances, Mr. Brock disagrees with Region V's analysis, as set forth in the Region's response-to-comments document. *See* RTC Doc. at 4-6, 23 (Response to Comment Nos. 10-12, 14, 70). However, in all five instances, Mr. Brock's arguments on appeal consist of little more than broad, unsubstantiated assertions about Region V's alleged "lack of technical expertise," use of "faulty information and science" and "outdated scientific methods," failure to accept "scientific facts [that have] been proven again and again," and reiteration of scientific "falsehoods." *See* Brock Pet'n at 2-5 (Item Nos. 3-4, 6, 8, 17). At his most specific, Mr. Brock refers in one of the five arguments to EPA and U.S. Geological Survey studies purportedly conducted more than twenty years ago; in so doing, however, he fails to identify the studies by title or document number or to cite any relevant page numbers therein. *Id*. at 2 (Item No. 3). In a second instance, Mr. Brock mentions Region V's allegedly improper use of core readings purportedly taken from a well in another state, but he does not identify the name or location of the well, the state in which the well is

[23] According to the Region, "Darcian flow" is "flow through a medium [that] may be nonuniform on a microscopic scale but [that] can be treated as uniform on a macroscopic scale." RTC Doc. at 23 (Response to Comment No. 70). One example of "non-Darcian flow" is "flow through a single transmissive fracture in an otherwise uniform reservoir." *Id.* Region V concluded that fluid flow within the Mt. Simon Formation is Darcian in character. *Id.*

located, or the name or administrative record number of the document containing this information. *Id*. at 3 (Item No. 8).

With respect to Mr. Brock's Item No. 3, Region V answers by repeating its conclusion, expressed in its response-to-comments document, that contamination of the Great Lakes is unlikely to be caused by EDS's wells. EPA Br. at 31; *see* RTC Doc. at 4-5 (Response to Comments No. 10). The Region also states that it is unaware of any study authored by EPA, the U.S. Geological Survey, or any other party that establishes a causal link between underground injection of waste and contamination of Great Lakes water, as Mr. Brock seems to contend. EPA Br. at 31. For Item No. 4, Region V cites its analysis of the well site's seismicity and finding that the site is stable and compatible with UIC well operation. *Id*. at 32. For Item No. 6, the Region points out that Congress specifically authorized the use of injection wells for hazardous waste disposal and argues that this Board is not the appropriate forum for challenges to congressional decisions or the regulations EPA promulgated to implement Congress' intent.[24] *Id.* at 34. Finally, with respect to Item Nos. 8 and 17, the Region summarizes its technical conclusions, asserts that the core readings in question were taken from the EDS wells and not from an out-of-state well, and contends that

[24] We have categorized the various claims contained in Mr. Brock's Item No. 6 as including a technical challenge, based on his assertion that "EPA reiterates [in its response to comments] the falsehood that deep well injection is a safe and proven technology. It is not safe and has been proven dangerous on several occasions * * *." Brock Pet'n at 3. We have also categorized other claims raised in Item No. 6 as new arguments presented for the first time on appeal and as contentions that do not challenge UIC permit conditions. *See infra* Parts II.B.2, .4. In addition, we agree with Region V that Mr. Brock's Item No. 6 essentially presents a challenge to the underlying statute and regulations, and we decline on jurisdictional grounds to entertain the appeal on that basis as well. *See In re Envotech, L.P.*, 6 E.A.D. 260, 269-70 (EAB 1996) (construing similar claim that underground injection is "unsafe and unproven technology" as nonjurisdictional challenge to validity of UIC regulations and policy judgments underlying structure of UIC program); *accord In re Puna Geothermal Venture*, 9 E.A.D. 243, 249 n.7 (EAB 2000); *In re Envtl. Disposal Sys., Inc.*, 8 E.A.D. 23, 35 (EAB 1998); *In re Suckla Farms, Inc.*, 4 E.A.D. 686, 698 (EAB 1993).

Mr. Brock failed to identify any faulty data or cite any particular permit provision as the subject of his objections.[25] *Id*. at 35-36, 43-44.

Upon examination of all these matters, we find no basis for granting review of Region V's permit decisions. As mentioned, we expect, in a challenge to technical issues, a petitioner to present us with references to studies, reports, or other materials that provide relevant, detailed, and specific facts and data about permitting matters that were not adequately considered by a permit issuer. *See, e.g.*, *Steel Dynamics*, 9 E.A.D. at 174-81 (remanding permit issuer's "potential to emit lead" analysis); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 134-44 (EAB 1999) (remanding "best available control technology" analysis); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 414-19 (EAB 1997); *see also In re Wash. Aqueduct Water Supply Sys.*, NPDES Appeal No. 03-06, slip op. at 19-35 (EAB July 29, 2004), 11 E.A.D. ___ (remanding permit issuer's data representativeness and "reasonable potential to exceed water quality standards" analyses for failure to respond adequately to technical comments); *In re Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 334-43 (EAB 2002) (remanding permit for reevaluation of water quality standards compliance analysis). In each of the five instances in this category, however, Mr. Brock falls short of this standard, even when his arguments are construed as generously as possible.[26] Fairly read, his appeal fails to present any sufficiently specific

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[25] EDS, for its part, contends that Mr. Brock's Item Nos. 3, 4, 8, and 17 are matters of the Agency's technical expertise that must be accorded "particular deference," and that Mr. Brock failed to provide specific information to rebut or cast doubt on the Region's analysis of these matters. EDS Br. at 30-32, 34-35. EDS also construes Item No. 6 as a challenge to the statutory and regulatory provisions that comprise the UIC program and argues that this is not the proper forum in which to litigate such a challenge. *Id*. at 31.

[26] We recognize that Mr. Brock is not represented by legal counsel and, as in previous cases, we have therefore endeavored to construe his objections liberally so as to identify the substance of his arguments. *E.g.*, *In re Sutter Power Plant*, 8 E.A.D. 680, 687 (EAB 1999) (citing cases). However, "[w]hile the Board does not expect or demand that [*pro se*] petitions will necessarily conform to exacting and technical pleading requirements, a petitioner must nevertheless comply with the minimal pleading standards (continued...)

or compelling evidence or argument that would cast doubt on the thoroughness or rationality of the Region's technical evaluations and conclusions. *Cf. In re Phelps Dodge Corp.*, 10 E.A.D. 460, 495-96 (EAB 2002) (rejecting challenge to endangered species analysis for lack of sufficient specificity); *Ash Grove*, 7 E.A.D. at 403-13 (rejecting challenges to risk assessment analysis for failure to meet heavy burden of proving clear error on technical grounds); *In re Envotech, L.P.*, 6 E.A.D. 260, 267-71, 283-99 (EAB 1996) (rejecting challenges to permit issuer's technical analyses on grounds of insufficient evidence and/or specificity); *Beckman*, 5 E.A.D. at 20-23 (same). Review is therefore denied as to these issues.

2. *Claims Raised for First Time on Appeal*

Second, Mr. Brock advances a number of arguments that Region V asserts were not raised during the public comment period or hearing on the draft UIC permits, including claims that: (1) EPA is "heavily invested" in underground injection as a form of waste disposal and "cannot extricate its own interests from the commercial interests in this matter" (Item No. 1); (2) EPA has "worked closely" with Halliburton Company and caused irreparable harm to the recycling and chemical-breaking industries by refusing to abandon this UIC permitting process (Item No. 6); (3) a "similar" well in Midland, Michigan, has "contaminated a large swath of Michigan waters with dioxins" and thus casts doubt on the safety of UIC technology (Item No. 6); (4) this UIC permitting process is capricious, "plastic," and contradictory (Item No. 15); and (5) EPA failed to consult the U.S. Geological Survey and thus has "overstepped its bounds" (Item No. 16). *See* Brock Pet'n at 1-4; EPA Br. at 28, 34, 41-43.

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[26](...continued)
and articulate *some* supportable reason why the [permit issuer] erred in its permit decision in order for the petitioner's concerns to be meaningfully addressed by the Board." *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 19 (EAB 1994); *accord Sutter*, 8 E.A.D. at 687-88; *Envtl. Disposal Sys.*, 8 E.A.D. at 28 n.5. This Mr. Brock has failed to do in regard to these technical issues.

The regulations governing this UIC permit review process mandate that persons seeking review of a permit must demonstrate that any issues or arguments raised on appeal were previously raised during the public comment period (including the public hearing) on the draft permit, or were not reasonably ascertainable at that time. 40 C.F.R. §§ 124.13, .19(a); *see In re Renkiewicz SWD-18*, 4 E.A.D. 61, 63-64 (EAB 1992). Issues not "preserved for review" in this fashion may not be raised for the first time on appeal. As we have explained, "The effective, efficient and predictable administration of the permitting process demands that the permit issuer be given the opportunity to address potential problems with draft permits before they become final." *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 250 (EAB 1999); *accord In re Jett Black, Inc.*, 8 E.A.D. 353, 358 (EAB 1999), *appeal dismissed for lack of standing sub nom. Levine v. EPA*, No. 01-3072 (6th Cir. Feb. 18, 2003); *In re Envtl. Disposal Sys., Inc.*, 8 E.A.D. 23, 30 n.7 (EAB 1998); *In re Brine Disposal Well*, 4 E.A.D. 736, 740 (EAB 1993); *Renkiewicz*, 4 E.A.D. at 64. "'In this manner, the permit issuer can make timely and appropriate adjustments to the permit determination, or, if no adjustments are made, the permit issuer can include an explanation of why none are necessary.'" *In re Essex County (N.J.) Res. Recovery Facility*, 5 E.A.D. 218, 224 (EAB 1994) (quoting *In re Union County Res. Recovery Facility*, 3 E.A.D. 455, 456 (Adm'r 1990)).

In this case, we reviewed the written and oral testimony submitted by Mr. Brock at the public hearing on EDS's draft UIC permits. We found no allegations therein raising any of the specific issues flagged by the Region as "new" on appeal.[27] *See* EPA Ex. 9

[27] Although it is neither our responsibility nor our practice to "scour the record" for information that would support a petitioner's arguments, we do attempt, as mentioned above, to construe *pro se* petitioners' arguments broadly so as to understand and resolve the questions fairly raised therein. In this case, the closest arguments we could find in Mr. Brock's hearing testimony to the ones raised in this proceeding include remarks that "[t]he injection process itself will create dioxins both at the surface where mixing will occur and at the injection point[, and c]ontrol and eventual remediation of these dioxins has not been reviewed"; [t]here has already been an 8% failure rate among Type I wells"; and "[EPA] is not acting like a business; it is acting as a business[; i]t has settled into a process that makes money for itself and allows it to continue into the future as a (continued...)

(Alfred Brock, *Remarks Regarding the High Pressure Injection Well at Romulus, Michigan* pts. 1-2 (June 29, 2004)) [hereinafter Brock Testimony]; Hearing Tr. at 60-65, 82-85. Moreover, Mr. Brock has not referred us to any comments or testimony on the draft permits, submitted by himself or other parties, that show these matters were presented to the Region prior to its issuance of the final permit decisions, nor does he make any argument that these matters were not reasonably ascertainable during the public comment period. *See* Brock Pet'n at 1-5. It therefore appears, as the Region contends, that the issues in this category of Mr. Brock's permit challenges were not raised during the public comment period and thus were not preserved for review in this appeal. *See Jett Black*, 8 E.A.D. at 365 n.18, 375 n.23 (reasonably ascertainable arguments not raised during the public comment period are not preserved for appeal); *Renkiewicz*, 4 E.A.D. at 64 (same). To the extent that any of these issues could be considered as having been raised below, we find that none of them are sufficiently specific to warrant Board review, even when liberally construed. *See In re Federated Oil & Gas*, 6 E.A.D. 722, 726-27 (EAB 1997); *In re Envotech, L.P.*, 6 E.A.D. 260, 267-71, 283-99 (EAB 1996); *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 20-23 (EAB 1994). Review of the permit on these issues accordingly must be denied.

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[27](...continued)
profitable concern." *See* Brock Testimony pt.1, at 17, 43 & attach. 2; Brock Testimony pt. 2, at 2; Hearing Tr. at 63-64. Region V, however, responded to these dioxin issues in Response to Comments No. 101; to questions about UIC well efficacy and safety in Response to Comments Nos. 4, 10-12, 14, 24-25, 33-34, 42, 47, 55, 57, 93, 109, and 111 (among others); and to several questions pertaining to financial matters in Response to Comments Nos. 15-17, 28, and 103. *See* RTC Doc. at 3-7, 9-12, 14, 16, 18, 29, 31-32, 34-35. A petitioner is obliged to address a permit issuer's response to comments in its attempts to identify clear error of law or fact in the permit issuer's permit analysis, *see* 40 C.F.R. § 124.19(a), but Mr. Brock has not done so with respect to these matters. Without specific argumentation in this regard, we cannot conclude that the Region's responses to these comments were inadequate, clearly erroneous, or otherwise warranted review.

3. *State, Local, and Non-SDWA/UIC Federal Laws*

Third, Mr. Brock raises questions about: (1) the choice of geographic location or "siting" of the injection wells (Item Nos. 1, 7); (2) the adequacy of the site for use by delivery trucks and emergency vehicles (Item No. 14); (3) the addition of high-risk traffic in an accident-prone area (Item No. 15); and (4) Region V's finding that hazardous waste will not migrate out of the injection zone for 10,000 years (Item No. 2). Brock Pet'n at 1-4. Region V and EDS contend that Mr. Brock's Item Nos. 1, 7, 14, and 15 pertain to matters of state law rather than to components of the SDWA/UIC program and thus are not properly before the Board. EPA Br. at 28, 34-35, 40-42; EDS Br. at 28-29, 31-34. The Region and EDS also argue that Mr. Brock's Item No. 2 relates to the RCRA no-migration exemption determination for EDS's wells, which similarly is not subject to administrative review by this Board. EPA Br. at 29-30; EDS Br. at 29.

Under the regulations governing this proceeding, we have jurisdiction to decide challenges to UIC permit conditions. *See* 40 C.F.R. § 124.19(a). We are not at liberty to resolve every claim brought before us in a permit appeal but must restrict our review to conform to our regulatory mandate. *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 514 (EAB 2002) (no jurisdiction to consider ground water pumping regulated by state law); *see In re Am. Soda, L.L.P.*, 9 E.A.D. 280, 289 (EAB 2000) (no jurisdiction to evaluate Bureau of Land Management's environmental impact statement process under the National Environmental Policy Act ("NEPA")); *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 259-60 (EAB 1999) (no jurisdiction to consider acid rain, noise, and water-related issues in Clean Air Act ("CAA") permitting context); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 161-72 (EAB 1999) (no jurisdiction in CAA context to consider issues concerning use of landfill for waste disposal, emissions offsets, NEPA issues, opacity limits, and other issues). Rather, the Board is charged with ensuring that Region V's permit decisions comport with the applicable requirements of the federal SDWA/UIC program.

Questions pertaining to the geographical siting[28] of injection wells and transportation and access issues are generally not subject to review by this Board, as they tend to flow from decisions made at the state or local levels pursuant to state or local laws, and not from requirements of the SDWA UIC program. *See, e.g.*, *In re Puna Geothermal Venture*, 9 E.A.D. 243, 278 (EAB 2000) (zoning conflict is matter to be resolved at state or local level, not by Board); *In re Envotech, L.P.*, 6 E.A.D. 260, 272 (EAB 1996) (siting of injection well is "matter of state or local jurisdiction rather than a legitimate inquiry for EPA (except to the extent that a petitioner can show that a well cannot be sited at its proposed location without necessarily resulting in violations of the SDWA or UIC regulations)"); *In re MCN Oil & Gas Co.*, Order Denying Review, UIC Appeal No. 02-03, slip op. at 30 (EAB Sept. 4, 2002) (same). Here, the Region noted in its response-to-comments document the state laws that govern geographic siting and certain transportation issues in Michigan and also provided a contact name and telephone number for additional information on Michigan regulations on siting of wells. *See* RTC Doc. at 3-4, 8, 16-17 (Response to Comments 4, 7, 21-22, 50-51) (citing Mich. Comp. Laws §§ 324.11101-.11153 (hazardous waste management provisions of Natural Resources and Environmental Protection Act)). EDS, for its part, identified the state law provisions that cover access to hazardous waste treatment, storage, and disposal facilities in the state. EDS Br. at 33 (citing Mich. Admin. Code r. 299.9605-.9607 (adopting 40 C.F.R. pt. 264 subpts. B-C)). Mr. Brock's questions pertaining to geographic well location, local transportation, and access issues, therefore, are state matters that fall outside the ambit of this Board's jurisdiction in UIC permit appeals. Furthermore, for the reasons set forth in Part II.A.1.c above, the merits of Region V's no-migration exemption determination for EDS's injections wells are also not properly before this Board. Review of the UIC permits is therefore denied as to these four issues.

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[28] In contrast, the *geological* siting of injection wells is regulated pursuant to UIC program rules at 40 C.F.R. § 146.62. As such, questions regarding a permit issuer's implementation of this provision would fall within the bounds of the Board's jurisdiction to review UIC permit decisions.

4. *Claims That Do Not Challenge UIC Permit Conditions*

Fourth, Mr. Brock raises a variety of challenges that Region V and EDS argue do not qualify as objections to a UIC permit condition or to any facet of Region V's compliance with the SDWA and UIC program in issuing EDS's permit decisions. *See* EPA Br. at 33-34, 36-42; EDS Br. at 31-34. These challenges include: (1) criticism that Region V's response to comments advocating the use of alternative technologies or recycling to dispose of hazardous waste reveals an improper Agency "preference" for underground injection (Item No. 6); (2) charges that EPA is "complicit" in fraud and abuse of power regarding the funding of the injection wells (Item Nos. 9 and 10); (3) a claim that the Region's response to comments about the owner of EDS "is an invitation to organized crime to approach the EPA and do business with them 'no questions asked'" (Item No. 12); (4) arguments that Region V's response to a comment about SPMT's brine extraction activities ignores the nation's need for oil and gas, and that these UIC permits will "choke off" one source of oil and gas and raise heating and manufacturing bills in southeastern Michigan (Item No. 13); and (5) a charge that Region V is handling this permitting process in a capricious, contradictory, "plastic" way (Item No. 15). *See* Brock Pet'n 2-4.

The Region and EDS are correct in their assessment of these issues. Mr. Brock has, in fact, failed to link his objections to any particular condition of the UIC permit decisions or to any other element of the SDWA and UIC regulations that might be subject to scrutiny in this forum. Instead, these objections are all generalized, unsubstantiated criticisms that are not properly a subject of Board review. Review is therefore denied as to these issues.

5. *Failure to Respond to Comments*

Finally, Mr. Brock argues that Region V inadequately responded to a comment that inquired about the cost to taxpayers of the EDS project. Brock Pet'n at 4 (Item No. 11). The Region answered the comment by stating, "The costs to taxpayers include the review of applications and all other available relevant information during the processing of these applications by government staff, and the costs

associated with the public notices and hearings." RTC Doc. at 7 (Response to Comment No. 18). Mr. Brock believes the Region erred by failing to include in its response a dollar sum of EDS project costs with breakdowns of various expenses. Brock Pet'n at 4.

In response, Region V observes that it is required to provide brief answers to significant comments and that it did so in this instance. EPA Br. at 38 (citing 40 C.F.R. § 124.17). The Region contends that an exact detailing of staff hours associated with processing the permit applications would be "difficult, time-consuming, and arguably a waste of taxpayer money." *Id*. EDS argues that the cost of processing a permit is of no consequence to the permit or its conditions and thus the matter should be rejected as outside the Board's jurisdiction. EDS Br. at 33.

In our view, Region V adequately considered and responded to this comment, and we find no reason to remand the UIC permits on this ground. Review is denied.

III. *CONCLUSION*

For the foregoing reasons, the petitions for review of UIC Permit Nos. MI-163-1W-C007 and MI-163-1W-C008 are denied.