IN RE VULCAN CONSTRUCTION MATERIALS, LP

PSD Appeal No. 10-11

REMAND ORDER

Decided March 2, 2011

Syllabus

The Sierra Club asks the Environmental Appeals Board ("Board") to review certain conditions of a prevention of significant deterioration ("PSD") permit the Illinois Environmental Protection Agency ("IEPA") issued to Vulcan Construction Materials, Inc., LP ("Vulcan") for renewed operation of a lime manufacturing plant ("Plant") in Manteno, Kankakee County, Illinois. Resolution of the Sierra Club's petition requires the Board to consider whether IEPA clearly erred in (1) determining that: (a) the permit's best available control technology ("BACT") emission limits for particulate matter measured as "PM_{10}" also constitute BACT for particulate matter measured as "$PM_{2.5}$", or (b) the permit's emission limits for $PM_{2.5}$ will comply with applicable National Ambient Air Quality Standards ("NAAQS"); (2) conducting the required PSD preconstruction monitoring and analysis by relying on regional monitoring data; (3) establishing emission limits for nitrogen oxide ("NO_x") and carbon monoxide ("CO"); and (4) failing to consider the new federal one-hour nitrogen dioxide ("NO_2") NAAQS.

Held: For the following reasons, the permit is remanded: (1) IEPA failed to provide sufficient justification for concluding that the permit's BACT limitations for PM_{10} also constitute BACT for $PM_{2.5}$, and for concluding that the plant's emissions of $PM_{2.5}$ will comply with applicable NAAQS; (2) IEPA failed to provide sufficient justification for the use of regional data in conducting required preconstruction monitoring and analyses; and (3) IEPA failed to provide sufficient justification for the permit's BACT limitations for NO_x and CO. In particular, IEPA failed to justify either the inclusion of a margin of compliance for NO_x or CO or the size of the margin.

On remand, IEPA must: (1) prepare a revised BACT analysis for $PM_{2.5}$ and reopen the public comment period to provide the public with an opportunity to review and comment on this analysis; (2) reevaluate whether the use of regional monitoring data was appropriate and reopen the public comment period to provide the public with an opportunity to review and comment ; and (3) either provide a sufficient rationale for including a compliance margin for NO_x and CO, as well as the size of any such margins, or remove the compliance margins from the permit. Should IEPA choose to retain the compliance margins, it must reopen the public comment period to provide the public with an opportunity to review and comment .

IEPA was not required to consider the new one-hour NO_2 standard at the time the permit was issued.

Before Environmental Appeals Judges Charles J. Sheehan, Kathie A. Stein, and Anna L. Wolgast.

Opinion of the Board by Judge Stein:

I. *STATEMENT OF THE CASE*

The Sierra Club asks the Environmental Appeals Board ("Board") to review certain conditions of a revised Clean Air Act prevention of significant deterioration ("PSD") permit the Illinois Environmental Protection Agency ("IEPA") issued to Vulcan Construction Materials, LP ("Vulcan") for renewed operation of a lime manufacturing plant ("Plant") in Manteno, Kankakee County, Illinois.[1] Petition for Review and Request for Oral Argument (May 10, 2010) ("Petition"). Both IEPA and Vulcan responded that the Sierra Club has failed to demonstrate that review is warranted. *See* IEPA Response to Petition for Review (July 19, 2010) ("IEPA Response"); Vulcan's Response to the Petition (June 14, 2010) ("Vulcan's Response").[2] Finally, with the Board's permission, the Sierra Club replied to both IEPA's and Vulcan's responses.[3] *See* Petitioner's Reply in Support (Aug. 19, 2010) ("Sierra Club's Reply").

II. *ISSUES ON APPEAL*

A. *Issues Raised*

Resolution of the Sierra Club's petition requires the Board to address the following four issues:

> 1. Has the Sierra Club demonstrated that IEPA clearly erred in determining that: (a) the permit's best available control technology ("BACT") emission limits for particulate matter measured as "PM_{10}" also constitute BACT for particulate matter measured as "$PM_{2.5}$"; and (b) the per-

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[1] The Plant received its initial permit in 1996, but ceased operation in May 2003. *See* Responsiveness Summary for the Public Comment Period on a Revision to the Construction Permit/PSD Approval for Vulcan Construction Materials, LP for its Lime Kiln in Manteno, Illinois (April 2010) ("Response to Comments") (Exhibit ("Ex.") 6 to Petition) at 2; Project Summary for an Application for Revised Construction Permit/PSD Approval from Vulcan Construction Materials for its Lime Plant in Manteno, Illinois ("Project Summary") at ¶ 3 & n.1.

[2] *See* Order Granting [Vulcan's] Motion to Participate and Respond to Petition for Review (May 28, 2010).

[3] *See* Order Granting Motion to File Reply (Aug. 25, 2010).

> mit's emission limits for $PM_{2.5}$ will comply with applicable National Ambient Air Quality Standards ("NAAQS")?
>
> 2. Has the Sierra Club demonstrated that IEPA clearly erred in conducting the required PSD preconstruction monitoring and analysis by relying on regional monitoring data?
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> 3. Has the Sierra Club demonstrated that IEPA clearly erred in establishing emission limits for nitrogen oxide ("NO_x") and carbon monoxide ("CO")? and
>
> 4. Has the Sierra Club demonstrated that IEPA clearly erred in failing to consider the new federal one-hour nitrogen dioxide ("NO_2") NAAQS?

B. *Parties' Assertions on Appeal*

The Sierra Club argues that IEPA made several errors in issuing the final permit. In particular, the Sierra Club requests a remand for the following four reasons.

First, the Sierra Club argues that although the permit contains emissions limitations for particulate matter measured as "PM_{10}" (denoting particulates 10 micrometers or less in diameter), IEPA failed to comply with BACT requirements[4] because the final permit does not also include a limitation on particulate matter measured as "$PM_{2.5}$" (denoting particulates 2.5 micrometers or less in diameter).[5]

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[4] Permits must ensure compliance with emissions limits constituting BACT to minimize emissions of regulated pollutants. CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); CAA § 169(3), 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(23), (j)(2)-(3). BACT is defined, in part, as follows:

> [BACT] means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under [the] Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

40 C.F.R. § 52.21(b)(12).

[5] "Particulate matter is the generic term for a broad class of chemically and physically diverse substances that exist as discrete particles (liquid droplets or solids) over a wide range of sizes." Na-

Continued

Petition at 3-18. In addition, the Sierra Club argues that IEPA failed to satisfy its statutory obligation to demonstrate that emissions of $PM_{2.5}$ would comply with applicable NAAQS and to allow for public comment on its analysis. *Id*. at 7-12. In response, both IEPA and Vulcan assert that the permit's BACT provisions regulating PM_{10} serve as an effective surrogate for limitations expressed in terms of $PM_{2.5}$. *See* Vulcan's Response at 11-20; IEPA Response at 5-9. That is, Vulcan and IEPA assert that BACT for PM_{10} also constitutes BACT for $PM_{2.5}$. Vulcan and IEPA also maintain that the record includes a detailed analysis of the ambient air quality impacts from the plant and that this analysis concludes that particulate emissions would not result in a violation of the NAAQS for $PM_{2.5}$. *See* Vulcan's Response at 21-25; IEPA Response at 8-9.

Second, the Sierra Club argues that IEPA erred in conducting the required PSD preconstruction monitoring analysis. Specifically, the Sierra Club asserts that IEPA failed to adequately analyze the ambient impacts of construction and operation of the Plant because IEPA relied on regional monitoring data. According to the Sierra Club, IEPA failed to follow EPA guidelines for justifying the use of regional data. IEPA responds that it complied with applicable EPA guidance and that the Board should defer to IEPA's expertise. IEPA Response at 9-13.

Third, the Sierra Club objects that the permit's BACT limitations for CO and NO_x inappropriately provide for an excessive compliance margin. The permit establishes a BACT limit for CO of 11.48 pounds per ton of limestone feed (11.48 lb/ton) and a limit of 4.5 lb/ton for NO_x. As the Sierra Club points out, however, prior stack testing during operation of the Plant in 1999 measured CO emissions of 4.76 lb/ton and NO_x emissions of 3.45 lb/ton. Response to Comments at 69 nn.191 – 92. The Sierra Club argues that the record lacks any basis for increasing allowable emissions of CO by 240% and of NO_x by 30%. Petition at 30-35. IEPA responds that the higher emission limits are necessary to allow for a margin of compliance to address variations in Plant operation. IEPA Response at 14-15. Similarly, Vulcan asserts that the permit issuer has discretion to include a "safety factor" to allow for fluctuations in emissions over an extended period of time. Vulcan's Response at 38-45.

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tional Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652, 38,653 (July 18, 1997). Particulates with an aerodynamic diameter of 10 micrometers or less is referred to as "PM_{10}." *Id*. at 38,653-54 n.1; *see* 40 C.F.R. § 50.6(c). PM_{10} is comprised of two principal fractions, referred to as "fine" and "coarse" particulate matter. 62 Fed. Reg. at 38,654. Fine particulate matter, labeled "$PM_{2.5}$," has an aerodynamic diameter of 2.5 micrometers or less, while coarse particulate matter has an aerodynamic diameter greater than 2.5 but less than or equal to 10 micrometers. *Id*. nn.5-6; *see* 40 C.F.R. § 50.7(a). The United States Environmental Protection Agency ("EPA") has promulgated separate NAAQS for PM_{10} and $PM_{2.5}$. *See* 40 C.F.R. §§ 50.6-.7.

Finally, the Sierra Club asserts that IEPA erred by failing to apply the Agency's recently-issued final rule establishing a new one-hour primary NAAQS for nitrogen dioxide ("NO_2"). *See* Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6474 (Feb. 9, 2010). EPA issued the rule on February 9, 2010, with an effective date of April 12, 2010. *Id.* IEPA issued the final permit on April 9, 2010, three days before the rule's effective date. In response, IEPA and Vulcan argue that the Sierra Club failed to preserve this issue for Board review because the issue was reasonably ascertainable but was not raised during the comment period on the draft permit. IEPA Response at 17; Vulcan's Response at 45-51. In addition, IEPA and Vulcan assert that because the new NO_2 standard was not in effect at the time IEPA issued the final permit, the new standard did not apply to this permit. IEPA Response at 17-18; Vulcan Response at 51-56.

III. *SUMMARY OF DECISION*

The Board concludes that the Sierra Club has met its burden of establishing that IEPA clearly erred in its permit determination on the first three issues discussed above. In particular, the Board holds that: 1) IEPA failed to provide sufficient justification for concluding that the permit's BACT limitations for PM_{10} also constitute BACT for $PM_{2.5}$, and for concluding that the plant's emissions of $PM_{2.5}$ will comply with applicable NAAQS; 2) IEPA failed to provide sufficient justification for the use of regional data in conducting required preconstruction monitoring and analyses; and 3) IEPA failed to provide sufficient justification for the permit's BACT limitations for NO_x and CO. With regard to the new one-hour primary NAAQS for NO_2, the Board holds that IEPA did not clearly err in declining to consider the new one-hour NO_2 standard at the time the permit was issued.

IV. *STANDARD OF REVIEW*

Under the rules governing this proceeding, a PSD permit ordinarily will not be reviewed unless it 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 review. *See* 40 C.F.R. § 124.19(a); Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). The Board's analysis of PSD permits is guided by the preamble to section 124.19, 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 Cardinal FG Co.*, 12 E.A.D. 153, 160 (EAB 2005). The burden of demonstrating that review is warranted rests with the petitioner, who must raise objections to the permit and explain why the permit issuer's previous response to those objections is clearly erroneous or otherwise warrants review.

In re BP Cherry Point, 12 E.A.D. 209, 217 (EAB 2005); *In re Steel Dynamics, Inc.*, 9 E.A.D. 740, 744 (EAB 2001).

V. *PROCEDURAL AND FACTUAL HISTORY*

On October 27, 2003,[6] Vulcan applied for a PSD permit to commence operation of an existing (but inactive) lime manufacturing plant in Manteno, Kankakee County, Illinois. The Plant consists of a rotary lime kiln with the capacity to produce 600 tons of lime per day and is designed to burn solid fuel (coal and petroleum coke). Project Summary (Ex. 5 to Petition) at 1. The principal source of emissions from the Plant is the kiln. *Id*. These emissions include particulate matter, sulfur dioxide, NO_x, and CO.

On April 17, 2009, IEPA issued a draft permit for the Plant and made the draft available for public review and comment. *Id*. at 1. IEPA also held a public hearing on the draft permit on June 4, 2009. IEPA issued its final permit determination on April 9, 2010 (see Construction Permit – PSD Approval – Revised NSPS Source (Apr. 9, 2010) ("Final Permit")), along with the Response to Comments. As stated above, the Petition was filed on May 9, 2010. The Board held oral argument in this matter on December 14, 2010, at which the Sierra Club, IEPA, and Vulcan participated.

VI. *ANALYSIS*

A. *Relevant Statutory and Regulatory Provisions*

The Clean Air Act's PSD program regulates air pollution in areas of the country deemed to be in "attainment" or "unclassifiable" with respect to the NAAQS. *See* CAA §§ 161, 165, 42 U.S.C. §§ 7471, 7475. NAAQS are "maximum concentration 'ceilings' measured in terms of the total concentration of a pollutant in the atmosphere." Office of Air Quality Planning and Standards, U.S. EPA, *New Source Review Workshop Manual* at C.3 (draft Oct. 1990) ("NSR Manual").[7] Congress charged EPA with developing NAAQS for air pollutants

[6] The record before the Board does not contain a clear explanation for the approximately 6-year lag between Vulcan's permit application and IEPA's issuance of the draft permit.

[7] The NSR Manual has been used as a guidance document in conjunction with new source review workshops and training and as a guide for state and federal permitting officials with respect to PSD requirements and policy. Although it is not a binding Agency regulation, the Board has looked to the NSR Manual as a statement of the Agency's thinking on certain PSD issues. *E.g.*, *In re ConocoPhillips Co.*, 13 E.A.D. 768, 772 (EAB 2008); *In re RockGen Energy Ctr.*, 8 E.A.D. 536, 542 n.10 (EAB 1999); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 129 n.13 (EAB 1999).

whose presence in the atmosphere in excess of certain concentration levels could "reasonably be anticipated to endanger public health or welfare."[8] CAA § 108(a)(1)(A), 42 U.S.C. § 7408(a)(1)(A); *see* CAA § 109, 42 U.S.C. § 7409. In geographical areas deemed to be in "attainment" for any of these pollutants, the ambient air quality meets the NAAQS for that pollutant. CAA § 107(d)(1)(A)(ii), 42 U.S.C. § 7407(d)(1)(A)(ii). In areas designated as "unclassifiable," air quality cannot be classified on the basis of available information as meeting or not meeting the NAAQS. CAA § 107(d)(1)(A)(iii), 42 U.S.C. § 7407(d)(1)(A)(iii).[9] Parties who wish to construct "major emitting facilities"[10] in attainment or unclassifiable areas must obtain preconstruction approval in the form of PSD permits to build such facilities. CAA § 165, 42 U.S.C. § 7475.

As part of the permit issuance process, the PSD regulations at 40 C.F.R. § 52.21 require, among other things, that new major stationary sources of air pollution, and any major modification of such sources, be carefully reviewed prior to construction to ensure that emissions from such facilities will not cause an exceedance of the NAAQS or applicable PSD ambient air quality "increments."[11] These permits must also require compliance with emissions limits constituting BACT to minimize emissions of regulated pollutants.[12] CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(b)(23), (j)(2)-(3).

When PSD permits are issued by a state pursuant to a delegation of the federal PSD program, as is the case here, such permits are considered EPA-issued permits and, therefore, are subject to administrative appeal to the Environmental Appeals Board ("Board") in accordance with 40 C.F.R. § 124.19. IEPA administers the PSD program in Illinois pursuant to a delegation of authority from U.S. EPA Region 5 (the "Region"). *See* Prevention of Significant Deterioration Delegation of Authority to State Agencies, 46 Fed. Reg. 9580 (Jan. 29, 1981)

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[8] NAAQS have been established for six criteria pollutants: sulfur dioxide, particulate matter, nitrogen dioxide, carbon monoxide, ozone, and lead. *See* 40 C.F.R. §§ 50.4 – 50.13.

[9] Areas may also be designated as "nonattainment," meaning that the concentration of a pollutant in the ambient air does not meet the NAAQS for that pollutant. CAA § 107(d)(1)(A)(i), 42 U.S.C. § 7407(d)(1)(A)(i). The PSD program is not applicable, however, in non-attainment areas. *See* CAA § 161, 42 U.S.C. § 7471.

[10] A "major emitting facility" is a stationary source in any of certain listed stationary source categories that emits or has the "potential to emit" 100 tons per year ("tpy") or more of any air pollutant, or any other source that has the potential to emit 250 tpy or more of any air pollutant. *See* CAA § 169(1), 42 U.S.C. § 7479(1).

[11] A PSD "increment" refers to "the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant." NSR Manual at C.3; *see also* 40 C.F.R. § 52.21(c) (setting forth increments for regulated pollutants).

[12] *See supra,* note 4.

(setting forth Delegation Agreement between State of Illinois and U.S. EPA); *In re Zion Energy, LLC,* 9 E.A.D. 701, 701 n.1 (EAB 2001).

B. *Issues Analyzed*

1. *Has the Sierra Club Demonstrated That IEPA Clearly Erred in Its Determination That (a) the Permit's BACT Emission Limitations for PM_{10} Also Constitute BACT for $PM_{2.5}$ and (b) the Plant's Emission of $PM_{2.5}$ Will Comply With Applicable NAAQS?*

a. *$PM_{2.5}$ BACT Analysis*

As mentioned above, the Act and EPA PSD regulations make major new stationary sources and major modifications, such as the Plant at issue in this case, subject to BACT for emissions of certain pollutants. CAA § 165(a)(4), 42 U.S.C. § 7375(a)(4); 40 C.F.R. § 52.21(j)(2). The NSR Manual sets forth a "top-down" process for determining BACT for a particular regulated pollutant. The process includes the following five steps: (1) identify all available control options for a targeted pollutant; (2) analyze the control options' technical feasibility; (3) rank feasible options in order of effectiveness; (4) evaluate energy, environmental, and economic impacts; and (5) select BACT and establish a pollutant emission limit achievable by the most effective control option not eliminated in a preceding step.[13] NSR Manual at B.5-.9; *see In re Northern Mich. Univ.*, 14 E.A.D. 283, 292-94 (EAB 2009) (explaining the steps in top-down analysis).

In its comments on the draft permit, the Sierra Club argued that even though EPA established NAAQS for $PM_{2.5}$ in 1997, IEPA failed to conduct a top-down BACT analysis for emissions of $PM_{2.5}$ in accordance with the above-mentioned procedures, or to include an appropriate $PM_{2.5}$ BACT limitation in the permit. *See* Letter from James P. Gignac, Sierra Club, to Dean Studer, IEPA, *Comments on Draft Prevention of Significant Deterioration Construction Permit for Vulcan Construction Materials*, at 30 (July 22, 2009) ("Sierra Club Comments") (citing National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652 (July 18, 1997) (codified as amended at, *inter alia*, 40 C.F.R. § 50.7)). In responding to these comments, IEPA did not dispute that, in preparing the draft permit, IEPA did not conduct a top-down BACT analysis for $PM_{2.5}$ emissions or establish a BACT limit for $PM_{2.5}$. Rather, IEPA determined that BACT for PM_{10} could serve as a surrogate for BACT for $PM_{2.5}$. In its Petition, the Sierra Club again asserts that IEPA erred by failing to conduct a $PM_{2.5}$-specific BACT

[13] Although the top-down analysis is not a mandatory methodology, it is frequently used by permitting authorities to ensure that a defensible BACT determination, involving consideration of all requisite statutory and regulatory criteria, is reached. *Northern Mich. Univ.*, 14 E.A.D. at 291-92; *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 183 (EAB 2000); *Knauf*, 8 E.A.D. at 129 n.14, 134 n.25.

analysis or to include a BACT emissions limitation for $PM_{2.5}$. *See* Petition at 3-18. Upon review, the Board concludes that IEPA has failed to provide sufficient support for its determination that the permit's BACT requirements for PM_{10} also constitute BACT for $PM_{2.5}$.

EPA released a policy memorandum affecting BACT determinations for $PM_{2.5}$ in October of 1997, just a few months after EPA promulgated the $PM_{2.5}$ NAAQS.[14] *See* Memorandum from John S. Seitz, Director, Office of Air Quality Planning & Standards, U.S. EPA, to Regional Air Directors, *Interim Implementation of New Source Review Requirements for $PM_{2.5}$* (Oct. 23, 1997) ("Seitz Memorandum"). The Seitz Memorandum established what is referred to as the "Surrogate Policy," which authorized the interim use of PM_{10} as a "surrogate" for $PM_{2.5}$ in meeting the PSD requirements because of "significant technical difficulties" attending full implementation of PSD requirements for $PM_{2.5}$, largely resulting from a lack of adequate tools for calculating $PM_{2.5}$ emissions. *Id.* at 1-2. EPA later reaffirmed the Surrogate Policy in April 2005, noting that the Agency had not yet promulgated an implementation rule for $PM_{2.5}$ and thus administration of PSD requirements for $PM_{2.5}$ emissions remained "impractical." Memorandum from Stephen D. Page, Director, Office of Air Quality Planning & Standards, U.S. EPA, to Regional Offices, *Implementation of New Source Review Requirements in PM-2.5 Nonattainment Areas*, at 4 (Apr. 5, 2005).

On May 16, 2008, EPA promulgated a final rule entitled "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers ($PM_{2.5}$)" to implement the new source review program for fine particulate matter. 73 Fed. Reg. 28,321 (May 16, 2008) ("2008 Implementation Rule"). The preamble to the 2008 Implementation Rule explains that the technical difficulties in calculating $PM_{2.5}$ emissions have now been largely resolved, which eliminated, in large part, the basis for using PM_{10} as a surrogate for $PM_{2.5}$ as permitted by the Surrogate Policy. *See* 73 Fed. Reg. at 28,340. The final rule, however, contained a delayed implementation process (referred to as the "grandfathering provision") allowing the Surrogate Policy to continue to apply to facilities in delegated states with completed and pending permit applications.[15] *See id.* The permit application in this matter was pending when the 2008 Implementation Rule was issued. Thus, during the draft permitting stage, IEPA, in reliance on the Sur-

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[14] The $PM_{2.5}$ NAAQS were challenged by numerous litigants and in May 1999, the U.S. Court of Appeals for the D.C. Circuit remanded, but did not vacate, the standards. *Am. Trucking Assocs., Inc. v. U.S. EPA*, 175 F.3d 1027, 1047-48, *on reh'g*, 195 F.3d 4 (D.C. Cir. 1999). Subsequently, the Supreme Court upheld the $PM_{2.5}$ standards. *Whitman v. Am. Trucking Assocs. Inc.*, 531 U.S. 457 (2001). In March 2002, the D.C. Circuit rejected all remaining challenges to the $PM_{2.5}$ standards. *Am. Trucking Assoc. v. U.S. EPA*, 283 F.3d 355 (D.C. Cir. 2002).

[15] The grandfathering provision was codified at 40 C.F.R. § 52.21(i)(l)(xi).

rogate Policy, substituted a PM_{10} BACT analysis for the $PM_{2.5}$ BACT analysis.[16]

Following issuance of the draft permit, however, EPA, on June 1, 2009, stayed the grandfathering provision. *See* 74 Fed. Reg. 26,098 (June 1, 2009) (staying grandfathering provision until Sept. 1, 2009); 74 Fed. Reg. 48,153 (Sept. 22, 2009) (extending stay of grandfathering provision until June 22, 2010).[17] Pursuant to the stay, reliance on the Surrogate Policy was no longer authorized for permit applications pending after the effective date of the 2008 Implementation Rule. This stay was in effect at the time IEPA issued its final permit decision on April 9, 2010. Thus, even if IEPA appropriately relied on BACT for PM_{10} as a surrogate for BACT for $PM_{2.5}$ in preparing the draft permit, it was not appropriate to rely on the Surrogate Policy at the time IEPA issued the final permit.

In its response to comments, IEPA purports to conduct a BACT analysis for $PM_{2.5}$. *See* Response to Comments at 40 (stating that IEPA conducted an assessment of $PM_{2.5}$ impacts due to the stay of the grandfathering provision);[18] *see also* Vulcan's Response at 21 (stating that IEPA conducted a BACT analysis for $PM_{2.5}$ in its Response to Comments). The analysis in IEPA's Response to Comments, however, continues to rely on the conclusion that PM_{10} can serve as a surrogate for $PM_{2.5}$. *See* Response to Comments at 37 (stating that the proposed Plant is an ideal situation in which to rely on surrogacy in establishing BACT for $PM_{2.5}$). As stated above, as a result of the stay of the grandfathering provision, permit applicants and issuers were not authorized to rely on PM_{10} as an appropriate surrogate for $PM_{2.5}$. Thus, it is not clear to this Board why IEPA nevertheless relied on a surrogacy analysis.[19]

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[16] The grandfathering provision applies only in situations where a source submitted a completed application by July 15, 2008, and the permit issuer "determines that the application was complete as submitted." 73 Fed. Reg. at 28,340. As stated above, the application for this permit was submitted on October 27, 2003. However, the record in the present case does not contain any documentation regarding the completeness of Vulcan's permit application. That is, nothing in the record indicates that IEPA made a determination that Vulcan's permit application was complete as of July 15, 2008. Indeed, IEPA conceded during oral argument that the record did not contain any such documentation. *See* EAB Oral Arg. Tr. at 30.

[17] Last year EPA proposed repealing the grandfathering provision for $PM_{2.5}$. *See* Implementation of NSR Program for [$PM_{2.5}$], 75 Fed. Reg. 6,827 (Feb. 11, 2010). At the time of this decision, that proposed rule has not been finalized.

[18] Although this assessment is titled "Assessment of $PM_{2.5}$ Air Quality Impacts," *see* Response to Comments at 40 n.102, IEPA stated at oral argument that the assessment was also intended to address BACT compliance. *See* Oral Arg. Tr. (Dec. 14, 2010) at 32.

[19] *See* Vulcan Response at 13 -14 ("In this instance, IEPA determined, through its analysis of the emissions projected to result from the Project performed in accordance with the PM_{10} surrogate policy and the general principles and practices with respect to reliance on surrogate pollutants, that the limits included in the Permit appropriately control $PM_{2.5}$ emissions expressed as PM.")

Further, even if a surrogacy analysis were appropriate in this case, the Response to Comments does not contain the degree of specificity necessary to support the conclusion that PM_{10} serves as an appropriate surrogate for $PM_{2.5}$ emissions. *See, e.g., In re Louisville Gas and Electric Co.*, Petition No. IV-2008-3 (Order Responding to Issues Raised in April 28, 2008 and March 2, 2006 Petition, and Denying in Part and Granting in Part Requests for Objection to Permit) (Adm'r Aug. 12, 2009).[20] In *Louisville Gas*, the Administrator stated that, in order to justify the use of a surrogacy analysis, permit applicants and issuers must demonstrate that PM_{10} is a reasonable surrogate for $PM_{2.5}$. *Id*. at 43-46. That demonstration must address, among other things, the differences between PM_{10} and $PM_{2.5}$ and must include a detailed and well-supported analysis of why PM_{10} is nevertheless an adequate surrogate. *Id*. The *Louisville Gas* decision also discusses possible approaches for conducting this analysis. *See id.* at 45-46. For example, the Administrator suggests the following approaches for demonstrating surrogacy:

> First, the source or the permitting authority establishes in the permit record a strong statistical relationship between PM_{10} and $PM_{2.5}$ emissions from the proposed unit, both with and without the proposed control technology in operation. Without a strong correlation, there can be little confidence that the statutory requirements will be met for $PM_{2.5}$ using the controls selected through a PM_{10} NSR analysis.

Id. at 45. In the alternative, the source or permitting authority could demonstrate:

> that the degree of control of $PM_{2.5}$ by the control technology selected in the PM_{10} BACT analysis will be at least as effective as the technology that would have been selected if a BACT analysis specific to $PM_{2.5}$ emissions had been conducted. We present here two possible paths to accomplish this. This first would be to perform a $PM_{2.5}$-specific BACT analysis, in which case the requirement is met if the control technology selected through the PM_{10} BACT analysis is physically the same as what is selected through the $PM_{2.5}$ BACT analysis, in all respects that may affect control efficiency for $PM_{2.5}$. The second path would be to perform a $PM_{2.5}$-specific BACT analysis, and show that while the type and/or physical design of the control technology may be different, the efficiency for $PM_{2.5}$ control of the technology selected through the PM_{10} BACT analy-

[20] The *Louisville Gas* decision is available at the following URL: http://www.epa.gov/region7/air/title5/petitiondb/petitions/lg_e_2nddecision2006.pdf.

> sis is equal to or better than the efficiency of the technology selected through the $PM_{2.5}$ BACT analysis, across the range of operating conditions that can be anticipated for the source and the control equipment. This demonstration may be based on engineering review and/or old or new emissions test data from units and control equipment similar to the proposed unit with the proposed control equipment.

Id. at 45-46. Although, as the Administrator made clear, these steps were not intended as an exhaustive list of the methods for demonstrating surrogacy, permit issuers should conduct a careful analysis of "the case law and the limits of the Surrogate Policy to determine what information and analysis would need to be included in the permit application and record before relying on the Surrogate Policy." *Id.* at 46.

IEPA's BACT analysis falls considerably short of the *Louisville Gas* benchmark. The analysis here contains only unsupported conclusory assertions that surrogacy is appropriate because "for the kiln and other process units that are controlled with filters, * * * the PM limits require proper operation of the filters, which are the 'best devices' for control of fine particulates * * * . For other operations that are controlled by work practices, [surrogacy is appropriate] because requirements reflect 'best practices' for emissions of PM, PM_{10} and $PM_{2.5}$." Response to Comments at 37. Such assertions, in the absence of concrete details, record support, and further comparison and analysis, are insufficient to support IEPA's conclusion that $PM_{2.5}$ emissions are "most appropriately set in terms of PM." *See* Response to Comments at 39.

As this Board has stated, BACT determinations are one of the most critical elements in the PSD permitting process, must reflect the considered judgment on the part of the permit issuer, and must be well documented in the administrative record. *See In re Desert Rock Energy Co., LLC*, 14 E.A.D. 484, 520 (EAB 2009); *Knauf*, 8 E.A.D. at 132; *accord In re Newmont Nev. Energy Inv., LLC*, 12 E.A.D. 429, 442 (EAB 2005); *In re Gen. Motors, Inc.*, 10 E.A.D. 360, 363 (EAB 2002). Because the record before the Board is insufficient to support IEPA's BACT determination for $PM_{2.5}$, the permit is remanded on this issue.

On remand, IEPA is ordered to prepare a revised BACT analysis for $PM_{2.5}$ and to reopen the public comment period to provide the public with an opportunity to review and comment on this analysis. As indicated above, the stay of the grandfathering provision was in effect at the time the final permit was issued. However, that stay has now expired. *See* Implementation of the [NSR] Program for [$PM_{2.5}$], 74 Fed. Reg. 48,153 (Sept. 22, 2009) (extending stay of grandfathering provision until June 22, 2010). Although EPA has proposed a repeal of the grandfathering provision, that repeal has not yet been finalized. On remand, if

applicable rules allow IEPA to continue to rely on a surrogacy analysis, IEPA must, consistent with the Administrator's decision in *Louisville Gas*, provide a sufficient, detailed, and well-supported basis for its conclusion that, in the particular circumstances of this permit, PM_{10} is a reasonable proxy for $PM_{2.5}$. If applicable rules prevent IEPA from relying on such an analysis, IEPA must conduct an adequate top-down BACT analysis for $PM_{2.5}$. In either case, IEPA must reopen the public comment period. In the interim, the Board suggests that IEPA consult with EPA as to the anticipated timing for final action on the proposed repeal of the grandfathering provision and whether EPA anticipates that parties will be able to continue to rely on existing surrogacy guidance.

b. *Ambient Air Quality Analysis*

As stated above, applicants for PSD permits must, among other things, demonstrate, through analysis of the anticipated air quality impacts associated with their proposed facilities, that their facilities' emissions will not cause or contribute to an exceedance of any applicable NAAQS or air quality increment.[21] *See* CAA § 165(a)(3), 42 U.S.C. § 7475(a)(3); 40 C.F.R. § 52.21(k)-(m). In its comments on the draft permit, the Sierra Club asserted that IEPA had failed to undertake the necessary modeling and analysis to demonstrate that the permit's emissions limits would ensure compliance the $PM_{2.5}$ NAAQS. *See* Response to Comments at 39. In response to this comment, IEPA stated that it "has assessed the impact on $PM_{2.5}$ air quality, using the results from the analysis for PM_{10} impacts." *Id*. at 39-40. IEPA states that "this assessment became necessary when [EPA] stayed the grandfathering provision of the PSD rules for $PM_{2.5}$." *Id*. at 40. IEPA states that "[t]his assessment shows that the plant would not result in exceedances of the $PM_{2.5}$ NAAQS." *Id*. (footnote omitted). The Response to Comments includes a footnote purporting to show the results of this assessment. *See id*. at 40 n.102.

On appeal, the Sierra Club asserts that IEPA failed to conduct its ambient air quality analysis prior to the close of the comment period. Petition at 9. Further, the Sierra Club argues that the model used in the $PM_{2.5}$ analysis is not clear from IEPA's response to comments and was not specified with "reasonable particularity" as required by the Act. *Id*. (quoting CAA § 165(e)(3)(D), 42 U.S.C. § 7475(e)(3)(D)).

As this Board has previously stated, "Congress has determined that the air quality analysis required by the regulations 'shall be available at the time of the public hearing on the application for such permit.'" *In re Hawaii Elec. Light Co.,*

[21] The PSD regulations identify the overall maximum allowable incremental increase in the ambient concentration of each pollutant that may occur in any attainment or unclassifiable area as a result of new or modified major emitting facilities. 40 C.F.R. § 52.21(c).

Inc, 8 E.A.D. 66, 102 (EAB 1998) ("*HELCO*") (quoting CAA § 165(e)(3)(c), 42 U.S.C. § 7475(e)(3)(c)). Thus, in *HELCO*, this Board remanded a permit to the permit issuer for preparation of an updated air quality impact report followed by notice and comment where data relevant to the impact analysis was not subject to the public scrutiny contemplated by the statute and applicable regulations. *Id.* at 102-103. In this case, the entire impact analysis was prepared after the close of the comment period and was not subject to public comment. Moreover, IEPA's response to comments provides only a cursory explanation of how the analysis was conducted. Under these circumstances, the permit is remanded to IEPA. On remand, IEPA must make the ambient air quality analysis for $PM_{2.5}$ available to the public,[22] and provide the public with the opportunity to submit comments.

2. *Has the Sierra Club Demonstrated That IEPA Clearly Erred in Conducting the Required Preconstruction Monitoring and Analysis by Relying on Regional Monitoring Data?*

As stated above, the regulations governing issuance of PSD permits require that new major stationary sources of air pollution, and major modification of such sources, be carefully reviewed prior to construction to ensure that emissions from such facilities will not cause an exceedance of the NAAQS or applicable PSD ambient air quality increments. 40 C.F.R. § 52.21. The CAA and implementing regulations require PSD permit applicants to collect and submit twelve months of ambient air quality monitoring data for the year preceding the date of permit application, showing pollutant concentrations at the site of the proposed facility and in areas that may be affected by emissions from that facility. CAA § 165(a)(7), (e), 42 U.S.C. § 7475(a)(7), (e); 40 C.F.R. § 52.21(m). These data may then be used, in conjunction with other information, to demonstrate the facility's compliance with the NAAQS and PSD increments. *See* NSR Manual at C.16-.21.

While site-specific data is generally required to demonstrate compliance with the NAAQS and PSD increments, longstanding Agency guidance provides for a waiver of this requirement where existing ambient data are deemed sufficiently representative of air quality in the targeted area – in terms of the sufficiency of the monitoring locales selected and the quality and currentness of the monitoring data – to legitimately be substituted for site-specific data. *See* NSR Manual at C.18-.19; Office of Air Quality, U.S. EPA, *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)* § 2.4, at 6-9 (May 1987) [hereinafter *Ambient Monitoring Guidelines*]; *see also*, *e.g.*, *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 145-48 (EAB 1999); *HELCO*, 8 E.A.D. at 97-105; *In re Hibbing Taconite Co.*, 2 E.A.D. 838, 850-51 (Adm'r 1989). The EAB and its predecessors have consistently followed this guidance. *See, e.g., Northern Mich.*

[22] IEPA's ambient air quality analysis must meet all applicable statutory and regulatory requirements.

Univ., 14 E.A.D. at 328; *Knauf*, 8 E.A.D. at 145-48; *HELCO*, 8 E.A.D. at 97-105; *Hibbing*, 2 E.A.D. at 850-52.

In its comments on the draft permit, the Sierra Club objected to the use of existing regional monitoring data rather than site-specific data to satisfy this requirement. Although the Sierra Club acknowledged that the Agency guidance allows for the use of regional monitoring data under certain circumstances, *see* NSR Manual at C.16-C.19 (summarizing conditions under which regional data may be used and referencing the *Ambient Monitoring Guidelines* as a source of additional guidance), the Sierra Club asserted that the reliance on regional data was inappropriate in this case. *See* Sierra Club Comments at 41-45. In particular, the Sierra Club asserted that the monitoring data used in this case, obtained from monitors located 20-25 miles from the Plant, were not appropriate for the preconstruction ambient air quality analysis because they were not representative of the air quality for the area in which the facility would be constructed and operated.[23] *Id.* The Sierra Club also argued that the regional data failed to meet the same quality standards required of on-site monitoring such as continuous instrument monitoring and documented quality control. *Id.* at 44.[24]

The *Ambient Monitoring Guidelines* provides three examples of when the use of regional monitoring data may be appropriate. The Guidelines state, in part:

> In situations where there is no existing monitor in the modeled areas, monitors located outside these three types of areas may or may not be used. Each determination must be made on a case-by-case basis. In order to clarify EPA's intent regarding the use of existing monitoring

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[23] IEPA states that the monitoring data was taken from monitors at three locations: Braidwood, Joliet, and Midlothian. Response to Comments at 75.

[24] The Sierra Club references the *Ambient Monitoring Guidelines*' data quality requirements. *Ambient Monitoring Guidelines* at 8. Those requirements state that monitoring data must be of similar quality as that obtained with site-specific monitoring and that "[a]s a minimum, this would mean:

> 1. The monitoring data were collected with continuous instrumentation. * * * [and]
>
> 2. The applicant should be able to produce records of the quality control performed during the time period at which the data were collected. Such quality control records should include calibration, zero and span checks, and control checks. In addition, quality control procedures should be a minimum specified in the instrument manufacturer's operation and instruction manual.

Id.

data, some examples are included to demonstrate the overall intent.

(a) Case I – If the proposed source or modification will be constructed in an area that is generally free from the impact of other point sources and area sources associated with human activities, then monitoring data from a "regional" site may be used as representative data. Such a site could be out of the maximum impact area, but must be similar in nature to the impact area. This site would be characteristic of air quality across a broad region including that in which the proposed source or modification is located. The intent of EPA is to limit the use of these "regional" sites to relatively remote areas, and not to use them in areas of multisource emissions or areas of complex terrain.

(b) Case II – If the proposed construction will be in an area of multisource emissions and basically flat terrain, then the proposed source or modification may propose the use of existing data at nearby monitoring sites if either of the following criteria are met.

> 1. The existing monitor is within 10 km of the points of proposed emissions, or
>
> 2. The existing monitor is within or not farther than 1 km away from either the area(s) of the maximum air pollutant concentration from existing sources or the area(s) of the combined maximum impact from existing and proposed sources.

* * *

(c) Case III – If the proposed construction will be in an area of multisource emissions and in areas of complex terrain, aerodynamic downwash complications, or land/water interface situations, existing data could only be used for PSD purposes if it were collected (1) at the modeled locations(s) of the maximum air pollution concentration from existing sources, (2) at the location(s) of the maximum concentration increase from the proposed

> construction, and (3) at the location(s) of the maximum impact area.

Ambient Monitoring Guidelines § 2.4.1, at 6-8.

In response to the Sierra Club's comments on this issue, IEPA stated that Illinois operated monitoring stations in the "general region" of the proposed Plant and that data from these locations made on-site preconstruction monitoring unnecessary. Response to Comments at 70-71.

> This is because of the nature of Illinois' ambient monitoring network. Ambient monitoring stations are sited to provide representative data for air quality in Illinois, as needed to support air quality planning and management in Illinois. These stations are also operated in accordance with quality assurance procedures so as to collect accurate data that can properly be relied upon for these purposes.

Response to Comments at 72 (footnotes omitted). In responding to comments stating that IEPA had failed to meet the criteria for the above-quoted Case II example in the *Ambient Monitoring Guidelines*, IEPA concluded that this case fits more appropriately into the Case I scenario. IEPA stated:

> The proposed plant is more appropriately addressed as if its situation is that addressed by Case I in the *Ambient Monitoring Guidelines*, not Case II * * *. Case I addresses the situation where a proposed project is located in an area that is generally free from the impact of other point sources and area sources associated with human activities. In this situation, monitoring data from a regional monitor, which may be characteristic of air quality across the region, may be used as representative data.
>
> * * *
>
> [T]he ambient monitoring stations used to provide background concentrations meet the relevant location criteria of the *Ambient Monitoring Guidelines.* The fact that these monitors are some distance from Manteno does not preclude their use. Indeed, it is consistent with the fact that they are regional monitors, which were sited to collect monitoring data for northeastern Illinois, focusing on air quality in the Greater Chicago Metropolitan Area, where industry and population are concentrated.

> The acceptance of data from the selected monitoring stations as suitable for the air quality analyses for the proposed plant reflects the Illinois EPA's knowledge of air quality in Northeastern Illinois and the character of the particular areas surrounding each monitoring station. The Braidwood monitor is at a site that is very similar to Manteno, as it is an agricultural area is [sic] which air quality is determined either by general background air quality, when the wind is toward the Chicago area, or urban transport, when the wind is coming from the Chicago Area. The Joliet monitor is at a site that is significantly more developed than the Manteno area, being in an industrial area on the edge of Joliet, an industrial-suburban city with a population of about 150,000 in the Greater Chicago Area. The Midlothian monitor is about 15 miles south of the Chicago loop, in an area that is significantly more developed than Manteno, in a community with a population of about 15,000. Given the character of Joliet and Midlothian, data from these monitoring stations in these communities are a conservative representation of background air quality in Manteno, which is likely significantly lower than measured at these stations.

Response to Comments at 74-75 (footnote omitted).[25] For these reasons, IEPA concluded that data from existing regional locations were sufficiently representative of the project site and were gathered in a manner sufficient to satisfy EPA requirements. *Id*. at 72.

On appeal, the Sierra Club again argues that IEPA erroneously relied on regional monitoring data because these data are not representative of air quality at the site. *See* Petition at 19-30. In particular, the Sierra Club points out that Agency policy allows data from off-site monitors to be used if those data represent the locations of: (a) maximum concentration increase from the proposed facility; (b) maximum air pollutant concentration from existing sources; and (c) maximum combined impact area (existing sources plus proposed facility). Petition at 21 (citing *Ambient Monitoring Guidelines* § 2.4.1, at 6-8; *Hibbing Taconite*, 2 E.A.D. at 850-51). The Sierra Club argues that IEPA's responses to comments on this issue are conclusory in nature and, to the extent that IEPA has developed a suffi-

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[25] With regard to the quality of the data, IEPA stated that "Illinois's ambient monitoring network is operated to meet the applicable 'quality requirements' for ambient monitoring. This is a necessary aspect of the operation of this network, as collected data is relied upon for designations of attainment and nonattainment, development of attainment strategies, and general air quality planning. Compliance with these quality requirements is confirmed by periodic audits conducted by [EPA]." Response to Comments at 76 (footnote omitted).

cient record on this issue, the record contradicts IEPA's conclusions. Petition at 28-30. In particular, the Sierra Club argues that the record does not support IEPA's reliance on the "Case I" example provided in the *Ambient Monitoring Guidelines* for facilities located in areas that are "generally free from the impact of other point sources and area sources associated with human activities." *Id.* at 29 (quoting *Ambient Monitoring Guidelines* § 2.4.1, at 6). The Sierra Club points out that the record shows the presence of several other point sources in the vicinity of the Plant and that IEPA recognized the existence of these sources in the Statement of Basis. *Id.* The Sierra Club asserts that, under these circumstances, this Board should review and remand the permit to IEPA.

Upon review of the record, the Board concludes that IEPA has failed to demonstrate that IEPA's use of regional monitoring data was appropriate in this case.

As stated above, the *Ambient Monitoring Guidelines* provide three examples of situations where the use of regional monitors may be appropriate (designated as "Case I," "Case II," and "Case III"). *Ambient Monitoring Guidelines* § 2.4.1, at 6-7.[26] IEPA determined that the use of regional monitoring data was appropriate because the Plant met the criteria described in Case I of the monitoring guidelines.[27] IEPA's entire justification for this determination, however, appears in one paragraph in IEPA's Response to Comments. Specifically, in responding to the Sierra Club's assertion that the Plant was located in an area with multiple sources and should therefore be subject to the Case II criteria, IEPA responded, in relevant part, that:

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[26] The *Ambient Monitoring Guidelines* state that these examples "are included to demonstrate the overall intent" of the guidelines and that each determination must be made on a case-by-case basis. *Ambient Monitoring Guidelines* § 2.4.1 at 6. While this suggests that these examples are not an exhaustive description of circumstances under which permit issuers may approve the use of regional data, where, as here, the record indicates that the permit issuer relied on one of these examples in determining that the use of such data was appropriate, this Board will closely examine whether the record supports this determination. *See Ash Grove Cement Co.*, 7 E.A.D. 387, 417-18 (EAB 1992) (explaining that the Board will review permit determinations based on the methods articulated by the permit issuer).

[27] In its Response to Comments, IEPA states that "based on the regulatory discussion of background concentrations in Section 8.2 of the Guidelines on Air Models, 40 CFR [part] 51, Appendix W, it is not clear that regional monitoring is subject to the criteria referred to" in the *Ambient Monitoring Guidelines*. Response to Comments at 74. To the extent that IEPA is suggesting that the use of regional data would have been appropriate in this case even if the criteria in the *Ambient Monitoring Guidelines* had not been satisfied, IEPA's assertion is unsupported by the record. In any case, the record shows that in making its determination regarding the use of regional monitoring data, IEPA relied on the above-quoted Case I criteria in the *Ambient Monitoring Guidelines*. Response to Comments at 74; IEPA Response at 12 (stating that the use of the Case I scenario was appropriate). Thus, this Board will review this issue based on the strength of the record that IEPA compiled. *See Ash Grove Cement*, 7 E.A.D. at 417-18.

> [w]hile there are some sources in the vicinity of the proposed project site, their impacts are more than adequately addressed by the combination of the selected background monitors and modeling of existing point sources. The proposed project is not located in an area in which the number and nature of the existing sources already in the area are such that existing, background air quality cannot [] reasonably be determined with sufficient accuracy to be protective of the NAAQS without conducting project-specific ambient monitoring.

Response to Comments at 74. IEPA does not cite to record evidence supporting this assertion, nor has the Board found supporting evidence in the permitting record. On the contrary, the record shows the presence of multiple emissions sources in the vicinity of the Plant, casting doubt on IEPA's assertion that the area is generally free from the impact of other point sources. *See* NAAQS Modeling Inventory (Ex. 7 to Petition) (indicating the presence of 23 emissions sources within 5 miles of the Plant and 61 sources within 10 miles). In light of this evidence, the Board, during oral argument, asked counsel for IEPA if the record contained any additional support for the use of the Case I criteria, which, as stated above, is not to be used in areas of multisource emissions. *See Ambient Monitoring Guidelines* § 2.4.1 at 6. Counsel for IEPA (Gerald T. Karr) was unable to cite any additional evidence supporting IEPA's determination.[28] Under these circumstances, IEPA has failed to satisfy its obligation to provide a reasoned and well supported explanation for its determination.

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[28] The oral argument transcript shows the following exchange between the Board and Gerald Karr:

> JUDGE: The Case [I] example allows for the use of regional monitoring networks[;] as I understand[,] it is not intended for cases of multi-source emissions. And what I'm struggling with is that there is data in the record that Sierra Club has pointed to which would appear to be circumstances of multi-source emissions. And I'm looking for how IEPA or Vulcan responds to that data to show that notwithstanding what would appear to be multi-source emissions, it's still appropriate to use the regional monitoring data. And that I think is something that would assist the Board in its deliberations.
>
> MR. KARR: Okay. And again, I think that the NSR Manual allows the [IEPA] to use this regional data regardless of the localized data that you reference. I think it's just in their discretion to use that and that they have felt that that was better representative than to address the situation that arose here.

EAB Oral Arg. Tr. (Dec. 14, 2010) at 37-38.

Although, as stated above, this Board has upheld the use of non site-specific regional data where circumstances warrant,[29] and the Board will generally defer to the permit issuer's technical determinations, permit issuers must justify the use of such data and provide "meaningful responses to significant comments that articulate with reasonable clarity the facts and circumstances supporting the permit issuers' decisions." *Northern Mich. Univ.*, 14 E.A.D. at 328 (remanding permit where permit issuer failed to provide sufficient explanation for using off-site monitors (citing *In re Amerada Hess Corp.*, 12 E.A.D. 1, 14-20 (EAB 2005)); *In re Washington Aqueduct Water Supply Sys.*, 11 E.A.D. 565, 586-90 (EAB 2004); *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 174-81 (EAB 2000); *In re RockGen Energy Ctr.*, 8 E.A.D. 536, 555-58 (EAB 1999); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417-18 (EAB 1997); *In re Austin Powder Co.*, 6 E.A.D. 713, 720 (EAB 1997); *In re Tallmadge Generating Station*, PSD Appeal No. 02-12, at 8-12, 22-28 (EAB May 21, 2003) (Order Denying Review in Part and Remanding in Part)). IEPA's response, lacking in facts and specificity, falls short of this standard.

The permit is therefore remanded on this issue. On remand, IEPA must reevaluate whether the use of regional monitoring data was appropriate in this case. Further, if IEPA continues to rely on the use of regional data, IEPA must provide a thorough explanation of how its determination complies with the applicable statutory and regulatory provisions and reflects EPA guidance on data representativeness. *See Northern Mich. Univ.*, 14 E.A.D. at 328. IEPA must also provide the public with an opportunity to review and comment on its determination on remand.

3. *Has the Sierra Club Demonstrated That IEPA Clearly Erred in Setting BACT Limitations for NO_x and CO?*

As stated above, the permit establishes a BACT limit for CO of 11.48 lb/ton and a limit of 4.5 lb/ton for NO_x. In its comments on the draft permit, the Sierra Club asserted that the 4.5 lb/ton NO_x BACT limit was inappropriate because, among other things, EPA's database containing relevant RACT/BACT/LAER technology determinations indicated that lower emission rates were achievable.[30]

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[29] *See, e.g., Knauf*, 8 E.A.D. at 145-48.

[30] "RACT" refers to "reasonably available control technology." CAA § 172(c)(1), 42 U.S.C. § 7502(c)(1). For areas designated as being in "nonattainment" with national ambient air quality standards, states must submit implementation plans that shall, at a minimum, provide for adoption of "reasonably available control technology." *Id.* "LAER" refers to the "lowest achievable emission rate." CAA § 171(3), 42 U.S.C. § 7501(3). In areas designated as being in nonattainment with national ambient air quality standards, any permit issued to construct and operate a source must require that the source comply with the "lowest achievable emission rate" for the relevant air pollutant, as measured by the most stringent emission limitation for such class or category of source contained in any state im-

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Sierra Club Comments at 40. In addition, the Sierra Club pointed out that in an October 2000 memo, "IEPA identified a number of facilities achieving a lower NO_x emission rate than 4.5 lb/ton." *Id.* Similarly, with regard to the proposed BACT limitation for CO, the Sierra Club argued that IEPA's October 2000 memo showed that lower emissions rates were achievable and that the record contained little support for the permit's 11.48 lb/ton BACT emissions limit. *Id.* at 41.

In its Response to Comments, IEPA stated that the NO_x and CO emissions rates were necessary to allow for variation in facility operation and allow the facility to achieve emissions rates over the life of the facility. Response to Comments at 65-70.[31] Importantly, IEPA states that "[t]he relevant test to establishing NO_x BACT limits is the one that was performed on the [Vulcan] kiln itself, when it was historically operated." *Id.* at 67. In particular, IEPA refers to stack tests conducted at the Plant in 1999 in which NO_x emissions were measured at 3.45 lb/ton. *Id.* Similarly, IEPA states that 1999 stack tests measured CO emissions at 4.76 lb/ton. *Id.* at 69. IEPA then used these 1999 emission test results for NO_x and CO as a baseline from which to establish emissions limits in the current permit. IEPA justifies the increases in the permit's emissions limitations between the 1999 stack tests and the limitations in the instant permit, as necessary to provide a compliance margin (also referred to as an operating margin or safety factor) that will, according to IEPA, address variations in Plant operation. *See id.* at 67-70; IEPA Response at 14-15.

On appeal, the Sierra Club argues that there is no basis in the record for the difference between the actual emissions measured in the 1999 stack tests (3.45 lb/ton for NO_x and 4.76 lb/ton for CO) and the emissions limitations in the proposed permit (4.5 lb/ton for NO_x and 11.48 lb/ton for CO). The Sierra Club objects to this increase of allowable emissions of NO_x by 30% and CO by 240% when compared to the 1999 stack tests for this facility. Petition at 30-35.

The Board recently addressed the issue of compliance margins or safety factors in some detail. As the Board explained:

(continued)
plementation plan or achieved in practice by other sources in that class or category. *Id.*; CAA § 173(a)(2), 42 U.S.C. § 7503(a)(2).

[31] With regard to the October 2000 memo, IEPA stated that the memo is a "historic document associated with the previous issuance of a revised construction permit" and did not recommend any particular NO_x limitation. Response to Comments at 66-67. Although the memo lists test results for other lime plants, IEPA states that the specific circumstances at those plants, such as the type of limestone being used, is unknown. *Id.* at 67. Thus, IEPA states that the listed test results "cannot be correlated to the NO_x emissions of the proposed Vulcan lime kiln and cannot be used as a basis to set a NO_x BACT limit for the proposed kiln." *Id.* Similarly, IEPA discounts the value of the October 2000 memo in establishing the permit's CO BACT limitations. *See id.* at 67, 70 (stating that the 2000 memo is a "historic document" listing results from facilities whose specific circumstances "are not fully known").

> [P]ermit writers retain discretion to set BACT levels that "do not necessarily reflect the highest possible control efficiencies but, rather, will allow permittees to achieve compliance on a consistent basis." *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 188 (EAB 2000); *accord In re Three Mountain Power, LLC*, 10 E.A.D. 39, 53 (EAB 2001). In particular, we have approved the use of a so-called "safety factor" in the calculation of the permit limit to take into account variability and fluctuation in expected performance of the pollution control methods. *See, e.g.*, [*In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 15 (EAB Mar. 14, 2000) ("Knauf *II*")] ("There is nothing inherently wrong with setting an emissions limitation that takes into account a reasonable safety factor."). As we noted in [*In re Masonite Corp.*, 5 E.A.D. 551 (EAB 1994)], where the technology's efficiency at controlling pollutant emissions is known to fluctuate, "setting the emissions limitation to reflect the highest control efficiency would make violations of the permit unavoidable." 5 E.A.D. at 560.
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> In essence, Agency guidance and our prior decisions recognize a distinction between, on the one hand, measured "emissions rates," which are necessarily data obtained from a particular facility at a specific time, and on the other hand, the "emissions limitation" determined to be BACT and set forth in the permit, which the facility is required to continuously meet throughout the facility's life. Stated simply, if there is uncontrollable fluctuation or variability in the measured emission rate, then the lowest measured emission rate will necessarily be more stringent than the "emissions limitation" that is "achievable" for that pollution control method over the life of the facility.

In re Russell City Energy Ctr., 15 E.A.D. 1, 58-59 (EAB 2010) (quoting *In re Newmont Nev. Energy Inv., LLC*, 12 E.A.D. 429, 441-42 (EAB 2005)).

In determining whether the selection of a compliance or safety margin is appropriate, the Board's analysis is fact- and case-specific. *See Russell City*, 15 E.A.D. at 80 (citing *In re Prairie State*, 13 E.A.D. 1, 55 (EAB 2006) (explaining that the "appropriate application of a safety factor in setting an emission limit is inherently fact-specific and unique to the particular circumstances of the selected technology, the context in which it will be applied, and available data regarding achievable emissions limits")). In each case, the Board will examine the specific facts and circumstances in order to determine if the compliance or safety margin is fully supported by the record and reflects the permit issuer's considered

judgment.[32] *Id.* at 64-65. While a well-supported compliance or safety margin will generally be upheld by this Board, a compliance or safety margin can cross the line from permissible to impermissible where it is "excessively large or is not sufficiently documented and supported." *Id.* Thus, "selection of a reasonable safety factor is not an opportunity for the permittee to argue for, or for the permit issuer to set, a safety factor that is not fully supported by the record, or that does not reflect the exercise of the permit issuer's considered judgment in determining that the emissions limit, including the safety factor, constitutes BACT." *Id.*

In *Russell City,* this Board upheld a compliance margin for the permit's NO_2 startup emissions limits while recognizing that "it could be argued that the compliance margins selected here tend towards the more generous side." *Id.* The Board did so, however, noting that the permit issuer had conducted an extensive BACT analysis, including an analysis of data from several other facilities. *Id.* Upon review of that data, the permit issuer concluded that a compliance margin was needed to ensure that emissions limits could be reasonably achieved over time. *See id.* at 50-51. Although petitioners in that case cited data from other facilities, such as the Palomar Energy Center in California, with lower NO_2 startup emissions rates, the permit issuer nevertheless determined that a higher limit was appropriate for the Russell City facility. The permit issuer in *Russell City* stated, in part, that:

> [T]he data from [the Palomar Energy Center in California] includes only five available data points for cold starts, which does not generate a great deal of statistical confidence that the maximum seen in this data set is representative of the maximum that can be expected over the

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[32] As this Board stated in *Russell City*:

> The Board has upheld a range of safety factors, compliance factors, and/or safety margins. *E.g.*, *Newmont*, 12 E.A.D. at 459-64 (upholding the permit issuer's limit based on a control efficiency of 66.5%, where reductions of up to 80 to 90% "can be achieved"); [*In re Kendall New Century Dev.*, 11 E.A.D. 40, 50-54 (EAB 2003)] (upholding permit issuer's selection of 25 ppmvd, even though similar facility has a 20 ppmvd limit); [*Steel Dynamics*, 9 E.A.D. at 188] (upholding the permit issuer's decision to use "the most stringent PM limit ever imposed" on similar facilities, 0.0018, rather than the "lowest ever achieved," .0001 grains per standard cubic feet); *Knauf II*, 9 E.A.D. at 15 (upholding permit issuer's use of a 25% safety factor); *Masonite*, 5 E.A.D. at 560-61 (upholding permit issuer's selection of a 95% control efficiency rather than vendor's proposed guarantee of 97%); *In re Pennsauken Cnty.*, 2 E.A.D. 768, 769-70 (Adm'r 1989) (concluding that 35.7% removal efficiency rate, as opposed to the 50% rate suggested by petitioners, was not clear error).

Id. at 64.

> entire life of the facility. Moreover, the wide variability in the data that is available highlights the variability in individual startups, underscoring the need to provide a sufficient compliance margin to allow the facility to be able to comply during all reasonably foreseeable startup scenarios. For both of these reasons, the Air District has concluded that a cold startup limit of 480 pounds of NO_2 is a reasonable BACT limit that is consistent with the startup emissions performance seen at the Palomar facility.

Id. at 50 (quoting permit issuer's "Additional Statement of Basis"). Upon review, the Board concluded that the compliance margin was rational in light of the evidence in the record. As the Board stated:

> [The permit issuer] repeatedly emphasized the wide variability in the facility data, and the record amply supports these statements. The performance data for cold startups at Palomar, for example, ranges from 22 to 375 pounds (or 26 to 435 pounds depending on which air district's calculations is considered), which is a large range. [The permit issuer] also provided several reasons for the wide variability across sources, as noted above. [The permit issuer's] other explanation for its use of a compliance factor for cold startups – that it only had a small number of data points – is consistent with the Board's discussion of the consideration and significance of long-term data in *Newmont*, where the Board explained that "because 'emissions limitation' is applicable for the facility's life, it is wholly appropriate for the permit issuer to consider, as part of the BACT analysis, the extent to which the available data demonstrate whether the emissions rate at issue has been achieved by other facilities over the long term." 12 E.A.D. at 442.

Id. at 63 (citations omitted). The Board concluded that the use of a compliance factor was well-supported and reflected the considered judgment of the permit issuer.

In contrast, the matter before the Board in the present case does not contain sufficient record support for the use of a compliance margin for emissions of either NO_x or CO. Unlike *Russell City*, the BACT analysis in this case[33] does not

[33] *See* Updated Best Available Control Technology Analysis, Vulcan Construction Materials, LP, Manteno, Illinois (Nov. 14, 2008) (Ex. F to Vulcan's Response).

include any discussion of what an appropriate compliance margin should be and why the margin should be set at a particular level. Indeed, the BACT analysis makes no mention of the need for a compliance margin in establishing the permit's NO_x or CO emissions limits. Nor does the analysis sufficiently assess data from other facilities which might support the proposed compliance margin. IEPA's only justification for the compliance margins in this case is contained in IEPA's responses to comments. Those responses, however, contain only a cursory and unpersuasive explanation for a compliance margin.

For example, in its comments on the draft permit, the Sierra Club argued that the NO_x emissions rate was inappropriate. The Sierra Club pointed out that a search of EPA's RACT/BACT/LAER clearinghouse revealed NO_x emissions rates at other plants lower than the 4.5 lb/ton NO_x emissions rate in the instant permit. Sierra Club Comments at 38. In its response, IEPA stated that the Sierra Club comment failed to consider factors resulting in differences in achievable NO_x rates at plants, such as Vulcan's, processing lower calcium, dolometic limestone. Response to Comments at 65-66. According to IEPA, such differences result in a higher NO_x emissions rate than at other lime kilns processing high calcium limestone. *Id.* at 66. While this may be true, it does little to explain the size of the particular compliance margin chosen in this case. As IEPA has stated, results from 1999 stack tests at the Vulcan Plant showed substantially lower NO_x emissions rates were achievable. Presumably, the Plant was processing the same low-calcium, dolometic lime during the 1999 stack test as proposed in the current permit. *See* Project Summary at 2 (stating that the facility uses dolometic limestone reserves from an adjacent quarry).

IEPA states further that the higher emission limits in the instant permit are necessary to address variations in Plant operation. IEPA Response at 14-15. Response to Comments at 66-70. In particular, with regard to NO_x emissions, IEPA stated, in part, as follows:

> The NO_x emissions of the kiln measured by this test were 3.45 pounds per ton of stone feed. The various limits for NO_x set as BACT all relate to this solid reference point for the NO_x emissions of the proposed kiln. At least initially, a limit higher than the tested emission rate must be set to provide an operating margin to address normal variation in the operation of the kiln.

Response to Comments at 67 (footnotes omitted). With regard to CO emissions, IEPA stated that "[a]s CO is controlled by good combustion practices, it is appropriate for the CO BACT limit to be set with a significant margin of compliance to address normal variability in operation. Accordingly, the BACT limit is set at 11.48 pounds per ton." *Id.* at 69. Aside from these conclusory assertions that a margin of compliance is appropriate, the only other explanation IEPA provides is

that the selected margins of compliance are necessary to account for the "conflicting relationship between NO_x and CO emissions during combustion processes and the BACT determination for NO_x." *Id.* at 69-70. That is, IEPA states that any practices designed to reduce NO_x will be accompanied by an increase in CO emissions. *Id.* Presumably, however, this "conflicting relationship" between NO_x and CO existed at the time the 1999 stack tests were conducted. Nevertheless, the 1999 test results showed a NO_x emission rate of 3.45 lb/ton and a CO emission rate of 4.76 lb/ton. Moreover, this inverse relationship does little to explain why IEPA selected the specific NO_x and CO limitations at issue in this case. IEPA provides no other explanation or data supporting a margin of compliance, nor does it provide any data or analysis supporting the size of the compliance margin.[34]

As stated above, while the Board generally upholds a well-supported compliance or safety margin, the record must contain a sufficient explanation and justification for the permit issuer's determination to include a margin as well as its size. IEPA's failure to include an explanation in its BACT analysis and its conclusory statements in responding to comments on this issue are insufficient. IEPA fails to provide an adequate rationale as to why a compliance margin is appropriate in this case. Significantly, even if IEPA had established the need for a compliance margin, the record is wholly devoid of an explanation for the 30% margin for NO_x or the 240% margin for CO.[35] While there may be valid reasons for including compliance margins, IEPA has failed to sufficiently articulate those reasons or to provide the necessary record support. Under these circumstances, as *Russell City* clearly stated could occur, *see Russell City*, 15 E.A.D. at 65, the compliance margin in this case crosses the line from permissible to impermissible. Thus, the limitations cannot be justified as BACT on this record. The permit is therefore remanded on this issue. On remand, IEPA must either provide a sufficient rationale for including a compliance margin for NO_x and CO, as well as a sufficient rationale for the size of any such margins, fully consistent with the

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[34] In its Response to Comments, IEPA also states that the permit's CO emissions limits are "consistent with recent CO BACT determinations for certain new lime kilns. In particular, the equivalent CO emission factors represented by the BACT limits set for [two new] lime kilns proposed by Graymont (PA), Inc., at its plant in Bellefonte, Pennsylvania, are 13.25 and 19.0 pounds per ton." Response to Comments at 69. IEPA, however, provides no analysis as to whether these sources are representative of the current facility or whether the emissions from these sources are set at a level that is higher or lower than other similar facilities. Further, because IEPA does not make clear what the NO_x limits are in these new lime kilns, the Board is unable to determine how the conflicting relationship between CO and NO_x operates in those cases.

[35] When confronted at oral argument with the lack of record support for the size of the compliance margins for either NO_x or CO, counsel for IEPA stated: "I guess I would just say that that's the analysis that [IEPA] developed based on the data they had with the idea that you want a setback at a level that's consistently achievable. You don't want to have them constantly going up and over the limits." EAB Oral Arg. Tr. at 42-43. This conclusory assertion is hardly the type of justification contemplated by the Board in *Russell City* in selecting the actual margin in a particular case.

Board's precedents, or remove the compliance margins from the permit. Should IEPA choose to retain compliance margins, it must reopen the public comment period to provide the public with an opportunity to submit comments.[36]

4. *Application of New One-Hour Primary NAAQS for Nitrogen Dioxide*

On February 9, 2010, EPA published in the Federal Register a final rule revising the primary NO_2 NAAQS "in order to provide requisite protection of public health as appropriate under section 109 of the Clean Air Act." 75 Fed. Reg. at 6475. This rule set the new 1-hour NO_2 NAAQS standard at 100 ppb to supplement the existing annual standard. The new standard became effective on April 12, 2010, one business day after IEPA issued the permit in this case.

On appeal, the Sierra Club argues that IEPA should have applied the new standard in this case because the permit did not become final on the date IEPA issued the permit (April 9, 2010). In particular, the Sierra Club argues that:

> pursuant to 40 C.F.R. § 124.15(b), the permit does not become final until "30 days after the service of notice of the decision" unless an appeal is filed with the Board, in which case the final permit is issued when the Board denies review, decides the case on the merits without a remand, or upon completion of remand proceedings after the Board's review (unless the Board notifies the parties that appeal after the remand is required to exhaust remedies). 40 C.F.R. § 124.19(f)(2). Here, there is no question that the permit decision could not have become final, even absent this appeal, until at least May 9, 2010. There is also no question that the effective date for the 1-hour NO_2 NAAQS occurred before the final permit was issued. Therefore, IEPA had a clear obligation to ensure that the [Plant] would not cause or contribute to a violation of the 1-hour NO_2 NAAQS. 42 U.S.C. § 7475(a)(3), (e)(1); 40 C.F.R. § 52.21(k)(1), (m).

Petition at 36. In response, IEPA asserts that this issue was not raised during the comment period and was therefore not preserved for review. IEPA Response at

[36] On remand, if IEPA determines based on the record that the use of compliance margins is appropriate in this case, the Board encourages IEPA to carefully review the Board's case law, including Russell City, as to the level of analysis and documentation required to support such a determination, including the importance of carefully evaluating multiple sources and data points as well as information such as recent permit limits at other similar facilities.

15-16. IEPA states further that a permit issuer is only required to apply the law in effect on the date a permit is *issued*, in this case April 9, 2010, and is under no legal obligation to retroactively apply new regulations. *Id*. at 16.

As this Board has stated, for purposes of determining the applicability of new rules or guidance, a permit is "issued" when the permit issuer makes its final permit decision pursuant to 40 C.F.R. § 124.15(a). *See Russell City*, 15 E.A.D. at 81 n.100 ("[u]nder EPA's procedural regulations, a permit is 'issued' when the Regional Office makes a final decision to grant the application, not when the permit becomes effective or final agency action.") (quoting Office of Air & Radiation, U.S. EPA, *PSD and Title V Permitting Guidance for Greenhouse Gases* at 3 n.6 (Nov. 2010)). Thus, because IEPA issued its permit decision in this case on April 9, 2010, before the effective date of the new one-hour NO_2 standard, IEPA was not required to ensure compliance with the NO_2 standard. Review is therefore denied on this issue.[37]

VII. *ORDER*

The permit is remanded. On remand, IEPA must: (1) Prepare a revised BACT analysis for $PM_{2.5}$ and reopen the public comment period to provide the public with an opportunity to review and comment on this analysis;[38] (2) Reevaluate whether the use of regional monitoring data was appropriate in this case;[39] and (3) Either provide a sufficient rationale for including a compliance margin for NO_x and CO, as well as the size of any such margins, or remove the compliance margins from the permit.[40]

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[37] Because review is denied on this issue, the Board does not reach the issue of whether the Sierra Club properly preserved the issue for review.

[38] As stated above, EPA has proposed a repeal of the grandfathering provision. On remand, if applicable rules allow IEPA to continue to rely on a surrogacy analysis, IEPA must, consistent with the Administrator's decision in *Louisville Gas*, provide a sufficient, detailed, and well-supported basis for its conclusion that, in the particular circumstances of this permit, PM_{10} is a reasonable proxy for $PM_{2.5}$. If applicable rules prevent IEPA from relying on such an analysis, IEPA must conduct an adequate top down BACT analysis for $PM_{2.5}$. In either case, IEPA must reopen the public comment period and provide the public with an opportunity to submit comments.

[39] Upon completion of this reevaluation, IEPA must reopen the comment period and provide the public with an opportunity to submit comments.

[40] Should IEPA choose to retain the compliance margins, it must reopen the comment period and provide the public with an opportunity to submit comments.

After IEPA completes its analysis on remand and issues its final permit decision pursuant to 40 C.F.R. § 124.15(a),[41] anyone dissatisfied with IEPA's decisions must file a petition seeking the Board's review in order to exhaust administrative remedies pursuant to 40 C.F.R. § 124.19(f)(1)(iii). Any such appeal shall be limited to issues addressed by IEPA on remand.

So ordered.

[41] The Board's decision in this case includes a broad remand on significant and foundational issues, including the BACT and air quality analyses, and it will require a reopening of the comment period and reissuance of the permit. Under the facts of this case, where the significant issues to be addressed on remand will necessitate reopening the comment period, IEPA must comply with all applicable standards in effect at the time the permit is issued on remand. *In re Shell Gulf of Mexico, Inc. & Shell Offshore, Inc.*, 15 E.A.D. 103, 150-51 n.76 (EAB 2010); *In re Shell Gulf of Mexico, Inc. & Shell Offshore, Inc*., OCS Appeal No. 10-01 through 10-04, at 19-25 (EAB Feb. 10, 2011) (Order on Motions for Reconsideration and/or Clarification) ("Clarification Order"). Since EPA has authority to lawfully exercise, "through an appropriate process, any discretion it has to interpret what 'all applicable standards in effect' means to a particular source being permitted," Clarification Order at 24, IEPA should confer with the EPA as to whether EPA plans to exercise any such discretion that would affect Vulcan.