IN RE BP CHERRY POINT

PSD Appeal No. 05-01

ORDER DENYING PETITION FOR REVIEW

Decided June 21, 2005

Syllabus

On February 14, 2005, Ms. Cathy Cleveland, a *pro se* petitioner, filed a notice of petition for review in connection with a Prevention of Significant Deterioration ("PSD") permit issued jointly by the Washington State Energy Facility Site Evaluation Council ("EFSEC") and the U.S. Environmental Protection Agency ("EPA"), Region 10, to BP West Coast Products, LLC ("BP"), for construction of a 720-megawatt natural gas-fired cogeneration facility (the "Facility") adjacent to BP's existing Cherry Point Refinery. The notice of petition for review was followed, on March 25, 2005, by Petitioner's Supporting Brief (the "Petition").

The Petition raised numerous issues concerning BP's proposed Facility. These issues can be generally categorized as follows: (1) whether EFSEC appropriately considered impacts on nearby Washington State and Canadian provincial parks; (2) whether EFSEC adequately evaluated the Facility's potential particulate matter ("PM") emissions; (3) whether EFSEC sufficiently evaluated the Facility's impact on ambient air quality impacts; (4) whether EFSEC misidentified Whatcom County's national ambient air quality standard ("NAAQS") designation; (5) whether Region 10 impermissibly failed to require that the final Permit include a 2.0 parts per million ("ppm") oxides of nitrogen ("NO_x") limit as Region 10 initially recommended; and (6) whether the administrative record for the final Permit inappropriately excluded a BP-British Columbia memorandum of understanding ("MOU").

Held: The Board denies review as to each of the issues raised in the Petition. Specifically, the Board finds that several of the issues raised in the Petition were not raised before the permitting authorities during the public comment period as the regulations require and, therefore, have not been preserved for review. Among these issues is whether Peace Arch Park (which consists of a Washington State Park and a British Columbia Provincial Park) is an international park for purposes of the Clean Air Act, requiring its treatment as a Class I area in the PSD analysis. Also not preserved for review is the question of whether EFSEC conducted an inadequate analysis of the proposed Facility's ambient air quality impacts, and thus whether ambient air quality monitoring should have been required to verify the modeling upon which the Permit relied. Finally, the issue of whether certain Permit documents misidentified Whatcom County as being in attainment with the NAAQS, when in fact the area's NAAQS status is "unclassifiable/attainment," was not raised during the comment period and therefore is not preserved for review. Moreover, the Petitioner did not explain why any of these issues were not ascertainable before the close of the public comment period. Accordingly, the Board denies review as to each of these issues.

As to EFSEC's evaluation of the proposed Facility's PM emissions, the essence of Petitioner's argument is that because EFSEC used total PM as a surrogate for PM with a diameter of 10 microns or less ("PM_{10}"), and PM_{10} as a surrogate for PM with a diameter of 2.5 microns of less ("$PM_{2.5}$"), EFSEC did not independently evaluate "each type of pollutant," and therefore performed an inadequate review of BP's permit application. The Board concludes that, contrary to Petitioner's suggestion, EFSEC's analysis did account for all relevant PM emissions, and by assuming that all PM emissions would be PM_{10} and that all PM_{10} would be $PM_{2.5}$, EFSEC performed a more *conservative* PSD analysis, not a more lenient one. With regard to Petitioner's argument that EFSEC responded inadequately to public comments regarding the potential human health consequences of ambient PM concentrations, the Board finds that Petitioner is challenging the adequacy of the PM NAAQS itself, rather than any condition of the PSD Permit. The Board declines to examine, in the context of a petition for review of a PSD permit, whether the NAAQS, that EPA adopted by regulation, are appropriately stringent in light of the applicable statutory requirements.

With regard to EFSEC's ambient air quality analysis in general, the Board finds that while Petitioner raises concerns about the ambient impact of the proposed Facility's emissions, she does not argue with any specificity that the air quality modeling upon which EFSEC relied was inaccurate or otherwise inadequate for purposes of demonstrating compliance with the PSD provisions. Moreover, the Board concludes that because BP's preliminary analysis demonstrated that impacts from the proposed Facility would be below significant impact levels, the permitting authority reasonably elected not to require a full ambient analysis addressing the Facility's emissions in combination with emissions from existing sources. Moreover, the Board observes that BP conducted a cumulative impact analysis, and EFSEC did examine the cumulative impact from multiple sources, even though this analysis was not required. The Board therefore concludes that Petitioner has failed to demonstrate clear error on the part of the permitting authorities.

With respect to the NO_x, emission limit in the final Permit, the Board finds that the record contains a detailed discussion of why EFSEC and Region 10 concluded that a more stringent 2.0 ppm limit would be inappropriate for the Facility based on source-specific technical considerations. Because Petitioner did not specifically acknowledge and address the permitting authorities' technical rationale, and because the burden on a petitioner is particularly heavy where the dispute involves matters of a technical nature, the Board concludes that Petitioner has not demonstrated clear error on the part of EFSEC or Region 10.

Finally, with regard to whether EFSEC was required to include the BP-British Columbia MOU in the administrative record, the Board observes that the administrative record for a PSD permit must include all material that a permitting authority relied upon in making its permitting decision. The Board notes, however, that the MOU in this case was a private agreement between BP and the Province of British Columbia to which EFSEC and Region 10 were not parties, and that there was nothing on the face of the Permit, or elsewhere in the record, suggesting that the permitting decision was in any way affected by the MOU. Because Petitioner does not provide any explanation of how the MOU relates to or affects any condition of the PSD Permit, and does not otherwise demonstrate that either EFSEC or Region 10 relied on the MOU with regard to any aspect of BP's Permit, the Board concludes that Petitioner has failed to demonstrate clear error on the part of the permitting authorities. Accordingly, the Board denies review of the Permit.

Before Environmental Appeals Judges Edward E. Reich, Kathie A. Stein, and Anna L. Wolgast.

Opinion of the Board by Judge Stein:

I. *INTRODUCTION*

This case involves a petition for review of a prevention of significant deterioration ("PSD") permit issued jointly by the Washington State Energy Facility Site Evaluation Council ("EFSEC")[1]and the U.S. Environmental Protection Agency ("EPA"), Region 10, to BP West Coast Products, LLC ("BP"), for construction of a 720-megawatt natural gas-fired cogeneration facility ("Facility"). BP plans to construct the proposed Facility adjacent to its existing gasoline refinery in Whatcom County, Washington. The *pro se* Petitioner in this case, who lives in a residential community near the Facility site, raises several issues regarding BP's final PSD permit ("the Permit").[2] Specifically, Petitioner argues that EFSEC failed adequately to consider (1) the impact of the project on nearby Washington State and Canadian provincial parks; (2) the health impacts of ambient exposure to particulate matter ("PM"); and (3) the impact of the project on ambient air quality. Petitioner also argues that the PSD Permit includes an inappropriate nitrogen oxide ("NO_x") emission limitation, that it misidentifies Whatcom County's attainment status, and that a memorandum of understanding ("MOU") between BP and the government of British Columbia was inappropriately excluded from the administrative record for the final Permit. We address each of these issues in turn below, and for the reasons explained herein, we conclude that Petitioner has not demonstrated that review is warranted. We therefore deny review.

II. *BACKGROUND*

A. *Statutory and Regulatory Background*

Congress enacted the Clean Air Act ("CAA" or the "Act"), 42 U.S.C. §§ 7401-7700, to "enhance the quality of the Nation's air resources so as to promote the public health and welfare and productive capacity of its populace." CAA § 101(b)(1), 42 U.S.C. § 7401(b)(1). As one means of achieving this objective, Congress enacted the CAA Amendments of 1970, which, among other things, di-

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[1] EFSEC serves as a centralized permitting authority within the State of Washington for the permitting of large energy facilities. *See* Wash Rev. Code chap. 80.50; BP's Response to Petition for Review ("BP's Response") at 2.

[2] The Permit is entitled Final Approval Notice of Construction and Prevention of Significant Deterioration, Permit No. EFSEC/2002-01.

rected EPA to create a list of those pollutants that pose a danger to public health and welfare, result from numerous or diverse mobile or stationary sources, and for which EPA had not previously issued air quality criteria. CAA § 108(a)(1), 42 U.S.C. § 7408(a)(1).[3] Congress then directed EPA to issue air quality criteria for each pollutant on the list, and to promulgate regulations establishing national ambient air quality standards ("NAAQS") for all criteria pollutants.[4] *See* CAA §§ 108(a)(1), 109(a)(2), 42 U.S.C. §§ 7408(a)(1), 7409(a)(2). Currently, there are six criteria pollutants with corresponding NAAQS: sulfur oxides (measured as sulfur dioxide ("SO_2")), PM, carbon monoxide ("CO"), ozone (measured as volatile organic compounds ("VOC")), nitrogen dioxide ("NO_2"),[5] and lead. *See In re Kendall New Century Dev.*, 11 E.A.D. 40, 43 (EAB 2003).

The Act further directs EPA to designate geographic areas within states, on a pollutant by pollutant basis, as being in either attainment or nonattainment with the NAAQS or as being unclassifiable. CAA § 107(d), 42 U.S.C. § 7407(d). An area is designated as being in attainment with a given NAAQS if the concentration of the relevant pollutant in the ambient air within the area meets the limits prescribed by the applicable NAAQS. CAA § 107(d)(1)(A), 42 U.S.C. § 7407(d)(1)(A). A nonattainment area is one with ambient concentrations of a criteria pollutant that do not meet the requirements of the applicable NAAQS. *Id.* Unclassifiable areas are those areas "that cannot be classified on the basis of available information as meeting or not meeting the [NAAQS]." *Id.*

Congress enacted the PSD provisions as part of the CAA Amendments of 1977, in part, to "protect public health and welfare * * * notwithstanding attainment" of a NAAQS and "to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources."[6] CAA § 160, 42 U.S.C. § 7470. Among other things, the PSD provisions require any person plan-

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[3] Pollutants for which EPA has established air quality criteria are commonly referred to as "criteria pollutants." 42 U.S.C. § 7408(a)(2).

[4] The NAAQS are air quality standards for particular pollutants "measured in terms of the total concentration of a pollutant in the atmosphere." Office of Air Quality Planning & Standards, U.S. EPA, New Source Review Workshop Manual ("NSR Manual") at C.3.

[5] Nitrogen dioxides are generally identified in terms of all nitrogen oxides, or NO_x. *See Alaska Dept. of Envtl. Conservation v. EPA*, 540 U.S. 461, 470 n.1 (2004)("The term nitrogen oxides refers to a family of compounds of nitrogen and oxygen. The principal nitrogen oxides component present in the atmosphere at any time is nitrogen dioxides. Combustion sources emit mostly nitric oxide, with some nitrogen dioxide. Upon entering the atmosphere, the nitric oxide changes rapidly, mostly to nitrogen dioxide" (quoting, Prevention of Significant Deterioration for Nitrogen Oxides, 53 Fed. Reg. 40,656 (1988)).

[6] Other objectives included protecting national parks, wilderness areas, monuments, seashores, and other special areas, and ensuring that permit decisions are made only after careful evaluation of the consequences of such decisions and with adequate opportunities for public participation. CAA § 160, 42 U.S.C. § 7470.

ning the construction or major modification of any major emitting facility in an attainment area or unclassifiable area first to apply for and receive a PSD permit.[7] Typically, state or local permitting authorities implement the PSD program, either according to a state PSD program that EPA has approved as a part of the state implementation plan ("SIP") required under CAA § 110(a), or pursuant to an agreement whereby EPA delegates federal PSD program authority to the state, as is largely the case in Washington State.[8] *See* 40 C.F.R. § 52.21(a)(1), (u); Agreement for Partial Delegation of the Federal Prevention of Significant Deterioration (PSD) Program (January 25, 1993).

A permitting authority may not issue a PSD permit unless the applicant demonstrates compliance with the substantive PSD requirements. Specifically, the applicant must perform a thorough analysis of the air quality impacts of the proposed construction or modification and demonstrate that the new or modified facility will not cause or contribute to an exceedance of any applicable NAAQS or air quality increment.[9] Additionally, with respect to PSD-regulated pollutants that the new or modified facility will emit in significant quantities,[10] the applicant must demonstrate that the facility will comply with emissions limitations that reflect application of the best available control technology ("BACT").[11] The deter-

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[7] A "major emitting facility" is any of certain listed types of stationary sources (including petroleum refineries and fossil fuel-fired steam electric plants) that emit or have the potential to emit 100 tons per year ("tpy") or more of any PSD pollutant, or any other stationary source with the potential to emit at least 250 tpy of any PSD pollutant. CAA § 169(1), 42 U.S.C. § 7479(1).

[8] In general, the appropriate EPA Regional office will issue PSD permits in any state that has not adopted an approvable PSD permit program in its SIP and has not taken delegation of the federal program. Under EPA's partial delegation agreement with the State of Washington, the State has primary responsibility for implementing the federal PSD program; however, Region 10 did not delegate its authority over the NO_2 increment. *See* EPA Region 10's Response Brief ("Reg. Br.") at 3. Thus, when, as here, a PSD permit is issued for a major source of NO_x in the State, EFSEC and Region 10 issue the PSD permit jointly. *Id.; see also In re Sumas Energy 2 Generation Facility*, PSD Appeal No. 02-10 & 02-11, slip op. at 2 n.3 (EAB, March 25, 2003).

[9] 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).

[10] EPA's PSD regulations identify applicable levels of significance for the pollutants that the new or modified facility will emit. 40 C.F.R. § 52.21(b)(23). These are different than the "significant impact levels" for ambient impacts, which are discussed later in this opinion. *See infra* pt. III.B.3.

[11] The Act defines BACT as:

> [A]n emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under [the Act] emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of

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mination of BACT is one of the central features of the PSD program. *See In re Knauf Fiberglass, GmbH*, 8 E.A.D. 121, 123 (EAB 1999) ("*Knauf I*").

When PSD permits are issued by a state pursuant to a delegation of the federal PSD program, as is the case here with respect to much of BP's Permit, such permits are considered EPA-issued permits and, therefore, are subject to administrative appeal to the Environmental Appeals Board ("EAB" or "Board") in accordance with 40 C.F.R. § 124.19.[12] *See, e.g., In re Hillman Power Co.*, 10 E.A.D. 673, 675 (EAB 2002). In general, the Board's jurisdiction to review state-issued permits is limited to those elements of the permit that find their origin in the federal PSD program — for example, the Board lacks authority to review conditions of a state-issued permit that are adopted solely pursuant to state law. *See In re Sutter Power Plant*, 8 E.A.D. 680, 688, 690 (EAB 1999) (explaining that "[t]he Board has jurisdiction to review issues directly related to permit conditions that implement the federal PSD program" (citing *Knauf I*, 8 E.A.D. at 161), and that "[t]he Board may not review, in a PSD appeal, the decisions of a state agency made pursuant to non-PSD portions of the CAA or to state or local initiatives and not otherwise relating to the permit conditions implementing the PSD program" (citing *Knauf I*, 8 E.A.D. at 167-68)).

B. *Factual and Procedural Background*

On June 10, 2002, BP submitted an application for construction of a 720-megawatt natural gas-fired, combined cycle combustion turbine cogeneration facility.[13] BP proposes to construct the Facility on a 33-acre parcel of land adjacent to its existing Cherry Point gasoline refinery in Whatcom County, Washington. The proposed Facility would include three combustion turbines, each with an electrical generator and heat recovery system, and one steam turbine, and would produce approximately 635 megawatts of electricity for sale to the regional electrical transmission grid, as well as approximately 85 megawatts of electricity and 510,000 pounds of steam for use at the adjacent refinery. *See* Permit at 1; EFSEC Ex F-2 (Responsiveness Summary) at 2. The proposed Facility would employ se-

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> production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.

CAA § 169(3), 42 U.S.C. § 7479(3); *see also* 40 C.F.R. § 52.21(b)(12) (EPA's regulatory definition of BACT).

[12] Those portions of the PSD permit that are not delegated to Washington State are administered by Region 10, and therefore are also subject to the Board's appellate jurisdiction.

[13] BP submitted a revised PSD application on April 22, 2003. Energy Facility Site Evaluation Council Exhibit ("EFSEC Ex") A.13 (Prevention of Significant Deterioration Application (Revised)) ("Revised PSD Application").

lective catalytic reduction ("SCR") to control emissions of NO_x, and would use an oxidation catalyst to reduce emissions of CO and VOC. *See* Permit at 2.

Whatcom County, Washington, is designated as an attainment/unclassifiable area for purposes of the NAAQS. *See* 40 C.F.R. § 81.348. As such, new or modified sources within the area, including BP's proposed Facility, must comply with the statutory and regulatory requirements of the PSD program. As noted above, because the State of Washington does not have an EPA-approved State PSD program, but rather issues PSD permits to sources within the State by exercising delegated federal authority, such permits are considered to be federal permits and fall within the Board's administrative jurisdiction. In fact, because EPA has delegated only part of the federal PSD program to the State, and reserved its authority as to other elements of the program,[14] the PSD permit in this case was issued jointly by Region 10 and EFSEC.

On November 7, 2003, EFSEC issued a draft PSD permit for the Facility, and made it available for public review and comment. *See* Reg. Br. at 3. EFSEC thereafter extended the period for public comment three times, resulting in a final comment deadline of March 1, 2004. *Id.* EFSEC also held a public hearing on the draft permit on December 9, 2003. *See* EPA Ex. C-38. Numerous parties, including the Petitioner, participated in the public hearing and/or submitted written comments on the draft permit.[15]

The State and EPA approved the Permit on December 21, 2004, and January 11, 2005, respectively.[16] *See* Reg. Br. at 3-4. The Petitioner, Ms. Cathy Cleveland, filed a notice of petition for review on February 14, 2005; however, upon doing so she requested an extension of time to file a complete explanation of the basis for her petition.[17] Pursuant to the Board's Order granting the Petitioner's initial unopposed motion for extension of time, and a subsequent unopposed motion for additional extension, Petitioner submitted Petitioner's Supporting Brief ("Petition") on March 25, 2005. EFSEC, BP, and Region 10 each filed timely responses to the Petition. Finally, on May 17, 2005, Petitioner filed a motion requesting leave to file a reply to ensure that the Board has an "accurate briefing on the relevant law." Motion for Leave to File Brief to Respond to BP, the Attorney

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[14] *See supra* note 8.

[15] The Certified Index to the administrative record lists 37 separate comments in addition to the public hearing transcript. Certified Index ("Cert. Index"), Part C.

[16] Procedurally, the permit approval process involves EFSEC's issuance of a PSD permit and a State Notice of Construction permit, which are then incorporated into a final Site Certification Agreement ("SCA"). The Governor then executes the SCA, and the final package is forwarded to Region 10 for its approval. *See* Reg. Br. at 3.

[17] After Petitioner's initial submission, BP requested leave to file a response to the petition for review, which the Board granted by Order dated March 10, 2005.

General, and EPA Region 10 Responses ("Reply Motion") at 1. We deny Petitioner's motion.[18]

III. *DISCUSSION*

A. *Standard of Review*

When evaluating a petition for review of a PSD permit, the Board first considers whether the petitioner has met the threshold pleading requirements, including timeliness, standing, and the preservation of issues for review. *See* 40 C.F.R. § 124.19; *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000) (*Knauf II*).[19] Among other things, in order to demonstrate that an issue has been preserved for appeal, a petitioner must show "that any issues being raised were raised during the public comment period." 40 C.F.R. § 124.19(a); *see also* 40 C.F.R. § 124.13; *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 249 (EAB 1999).[20] Moreover, this burden rests squarely with the petitioner — "It is not incumbent upon the Board to scour the record to determine whether an issue was properly raised below." *Encogen*, 8 E.A.D. at 250 n.10. Assuming that a petitioner satisfies the pleading obligations, the Board then evaluates the petition on the merits.

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[18] Petitioner's Reply Motion appears to rely on a fundamental misunderstanding of the Board's functioning with respect to petitions for review. The Board does not make its decisions based "on the law presented in the briefs filed * * * [without] further legal research if the briefing is inadequate or inaccurate." Reply Motion at 1. The Board independently evaluates the relevant law (including EAB precedent and judicial case law, as appropriate) and conducts its own examination of relevant portions of the administrative record to determine whether review is warranted in any particular case. Here, we do not believe that further briefing on either the legal or factual issues is necessary. More specifically, because we conclude that the issue of whether EFSEC should have treated Peace Arch Park as a Class I area was not properly preserved for review, *see infra* Part III.B.1, it is unnecessary to examine further whether or not the Park qualifies as an "international park" under the CAA and/or EPA's regulations. Moreover, to the extent that Petitioner argues for the first time in her Motion for Reply that the Park should be treated as a Class I area based on the general purpose of the PSD program to protect, among other things, "areas of special national or regional natural, recreation, scenic, or historic value," 42 U.S.C. § 7440(1), the Board regards this issue as untimely raised. *See* Reply Motion at 3; *Knauf I*, 8 E.A.D. at 126 n.9 (explaining that new issues raised in reply briefs are equivalent to late filed appeals and must be denied as untimely). Accordingly we deny Petitioner's motion for leave to file a reply.

[19] As a general matter, the Petitioner here has met the requirements for standing (having filed comments on the draft permit and participated in the public hearing) and for timeliness. We address the question of issue preservation on an issue-by-issue basis in the analysis portion of this opinion.

[20] Alternatively, a petitioner may demonstrate that an issue was not reasonably ascertainable during the public comment period. *See Encogen*, 8 E.A.D. at 250 n.8.

In order to succeed on the merits, the Petitioner must demonstrate that the actions of the permitting authority were based on (1) a finding of fact or conclusion of law that is clearly erroneous; or (2) an exercise of discretion or an important policy consideration that the Board should, in its discretion, review. 40 C.F.R. § 124.19(a); *see also In re Sutter Power Plant*, 8 E.A.D. 680, 686-87 (EAB 1999); *In re Steel Dynamics, Inc.*, 9 E.A.D. 740, 743-44 (EAB 2001). We have noted repeatedly that the "power of review should be only sparingly exercised" and that "most permit conditions should be finally determined at the [permitting authority] level." *See, e.g.*, *Knauf I*, 8 E.A.D. at 127 (quoting 45 Fed. Reg. 33,290, 33,412 (May 19, 1980) (preamble to the rulemaking that established part 124)). Accordingly, for each issue raised in a petition, the petitioner bears the burden of demonstrating that review is warranted. *See Steel Dynamics*, 9 E.A.D. at 744. Moreover, to obtain review, "petitioners must include specific information in support of their allegations. It is not sufficient simply to repeat objections made during the comment period; instead, a petitioner 'must demonstrate why the [permit issuer's] response to those objections (the [permit issuer's] basis for its decision) is clearly erroneous or otherwise warrants review.'"[21] *Id.* (quoting *In re LCP Chems.*, 4 E.A.D. 661, 664 (EAB 1993)); *accord In re Tondu Energy Co.*, 9 E.A.D. 710, 714 (EAB 2001); *Encogen*, 8 E.A.D. at 252.

We evaluate the Petition in this case below, and for the reasons described herein we deny review as to each issue raised in the Petition.

B. *Analysis*

In her Petition, the Petitioner raises several issues concerning BP's proposed Facility, the Facility's anticipated emissions, and the approval of BP's PSD Permit. These issues can be generally categorized as follows: (1) consideration of impacts on Peace Arch Park; (2) consideration of PM emissions; (3) ambient air quality issues; (4) alleged misidentification of Whatcom County's NAAQS designation; (5) consideration of EPA's initially recommended 2.0 parts per million ("ppm") NO_x limit; and (6) absence of the BP-British Columbia MOU from the administrative record for the final Permit. We address each of these issues in turn below.

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[21] We recognize that Petitioner in this case is not represented by counsel. As in previous cases of this nature, we have endeavored to construe Petitioner's objections generously so as to identify the substance of her arguments, notwithstanding the informal manner in which those arguments may be presented. However, "while the Board does not expect or demand that [*pro se*] petitions will necessarily conform to exacting and technical pleading requirements, a [*pro se*] petitioner must nevertheless comply with the minimal pleading standards and articulate *some* supportable reason why the Region erred in its permit decision." *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 19 (EAB 1994); *accord In re Indeck-Niles Energy Ctr.*, PSD Appeal No. 04-01, slip op. at 16 n.12 (EAB, Sept. 30, 2004).

1. *Peace Arch Park*

Petitioner objects to EFSEC's failure to identify Peace Arch Park (the "Park") as a Class I area for purposes of BP's permit application, and the resulting absence of a Class I area PSD analysis as to the Park.[22] *See* Petition at 2-6. Peace Arch Park is comprised of two adjoining parks, a Washington State Park and a British Columbia Provincial Park.[23] The two parks straddle the international border between Washington State and British Columbia, Canada.[24] According to the Petitioner, the Park should be evaluated as a Class I area because EPA's regulations define Class I areas as including all "international parks," and because the Park "is international in inception and in character."[25] *Id.* at 2.

It appears, however, that neither the Petitioner, nor any other party, raised this issue during the comment period on the draft permit or during the public

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[22] All areas subject to PSD review are classified as either Class I, Class II, or Class III. *See Knauf I*, 8 E.A.D. at 154. Class I areas are areas of special significance such as national parks and wilderness areas, or other areas "'of special national or regional value from a natural, scenic, recreational, or historic perspective'" that have been "specifically designated as Class I." *Id*. (quoting NSR Manual at E.1). The allowable air quality increments are smaller for Class I areas, *see* 40 C.F.R. § 52.21(c), and new or modified sources that may affect Class I areas receive special attention in the PSD permitting process, *see* CAA § 165(d), 42 U.S.C. § 7475(d); 40 C.F.R. § 52.21(p)(requiring involvement of the appropriate Federal land manager ("FLM") when the permit has implications for a Class I area). According to EPA guidance, a proposed source "may affect" a Class I area if the source will locate within 100 kilometers ("km") (approximately 62 miles) of any such area. *See Knauf I*, 8 E.A.D. at 155 (citing NSR Manual at E.16 n.47). Proposed sources within this range may be required to perform a variety of analyses relating to the Class I area. Possible analyses include an air quality analysis and a visibility impact analysis. *See* NSR Manual at E.16, E.22. Here, BP identified two Class I areas within 100 km of the proposed Facility, and three additional such areas within 200 km (at the request of the FLM BP included four of these areas in its air quality impact analysis). *See* Revised PSD Application at 3-6, 3-7. Because Peace Arch Park is not designated as a Class I area, BP did not evaluate anticipated impacts on it as such.

[23] The two parks are, officially, Peace Arch State Park and Peace Arch Provincial Park. *See:* http://www.parks.wa.gov/parkpage.asp?selectedpark=Peace Arch; http://www.env.gov.bc.ca/bcparks/explore/parkpgs/peacarch.html.

[24] According to the Petitioner, the Park is less than ten miles from BP's proposed Facility. *See* Petition at 2.

[25] 40 C.F.R. § 52.21(e) provides:

> All of the following areas which were in existence on August 7, 1977, shall be shall be Class I areas and may not be redesignated: (i) international parks * * *

This reflects similar language at CAA § 162, 42 U.S.C. § 7472.

hearings.[26] Nor is there any basis for the Board to conclude that the issue was not reasonably ascertainable during the public comment period. As noted above, in order for an issue to be preserved for purposes of administrative review, it must have been raised before the permitting authority during the public comment period or during public hearings, unless the issue was not reasonably ascertainable during the public comment period.

We feel it appropriate here to underscore the importance of this procedural prerequisite. It is not an arbitrary hurdle, placed in the path of potential petitioners simply to make the process of review more difficult; rather, it serves an important function related to the efficiency and integrity of the overall administrative scheme. As we have explained in the past, "[t]he intent of these rules is to ensure that the permitting authority * * * has the first opportunity to address any objections to the permit, and that the permit process will have some finality." *In re Sutter Power Plant*, 8 E.A.D. 680, 687 (EAB 1999). In this respect, "[t]he 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." *Encogen*, 8 E.A.D. at 249-50. To this end, the PSD permitting process requires a period of public notice and comment, so that issues may be raised and "the permit issuer can make timely and appropriate adjustments to the permit determination, or, if no adjustments are appropriate, the permit issuer can include an explanation of why none are necessary." *In re Union County Resource Recovery Facility*, 3 E.A.D. 455, 456 (Adm'r 1990); *accord Sutter*, 8 E.A.D. at 687.

If an issue is not raised during the notice and comment process, however, the permitting authority is provided no opportunity to address the issue specifically prior to permit issuance. In such instances, if the Board were to exercise jurisdiction, it would become the first-level decisionmaker as to such newly raised issues, contrary to the expectation that "'most permit conditions should be finally determined at the [permitting authority] level.'" *Knauf I*, 8 E.A.D. at 127 (quoting 45 Fed. Reg. 33,290, 33,412 (May 19, 1980)). Alternatively, the Board might re-

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[26] While the Petition raises a factual question regarding whether the administrative record reflects the full range of issues raised during the public comment process (including the public hearing), it appears that this concern arises from a prior miscommunication with the permitting authority (Petitioner reports that an EFSEC representative informed her that "public comments were not recorded verbatim"). *See* Petition at 30-31. In fact, it is clear that copies of the public comments appear *in full* in the administrative record, and that the public hearing was recorded in a verbatim transcript. EFSEC Ex C-1 through C-38. BP's Response supports this observation. *See* BP's Response at 5 n.3. Accordingly, we do not believe that any further inquiry is warranted in this regard. Petitioner also argues that we should not deny the Petition based on a finding that the issues therein were not preserved for review to the extent that we are able to conclude that she intended to raise additional issues, even if she did not in fact do so. *See* Petition at 31-32. For the reasons described herein, a person's *intention* to raise an issue during the public comment period (or at a public hearing) cannot preserve the issue for review if the issue is never in fact raised.

mand such issues back to the permitting authority for initial determination at that level, potentially resulting in an unnecessarily protracted permitting process, where each time a final permit is issued and a new issue is raised on review, the permit must be sent back to the permit issuer for further consideration. Such an approach would undermine the efficiency, predictability, and finality of the permitting process.[27] *See In re Sumas Energy 2 Generation Facility*, PSD Appeal No. 02-10 & 02-11, slip op. at 10 (EAB, March 25, 2003) ("[A]llowing a petitioner to raise for the first time on appeal concerns that could have been brought to the attention of the permitting authority, would leave the PSD permit system open-ended, frustrating the objective of repose and introducing intolerable delay."). Thus, in the context of petitions for review, EPA's regulations require "a demonstration that any issues being raised were raised during the public comment period," thereby ensuring that the permitting authority had notice as to all the issues that may be raised on review.[28] 40 C.F.R. § 124.19(a).

Because, here, EFSEC's treatment of the Park was not raised in any public comment or by any participant in the public hearing, the issue has not been preserved for review.[29] Accordingly, we deny review of this issue.[30]

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[27] Such an approach, by introducing new substantive issues after permit issuance, also would run contrary to the principle that the administrative record for a permitting decision is complete at the time of permit issuance. *See* 40 C.F.R. § 124.18; *see also In re Sierra Pac. Indus*., 11 E.A.D. 1, 7 (EAB 2003).

[28] The one exception involves issues that were not reasonably ascertainable during the public comment period, which may be raised on appeal even if they were not raised during the underlying permit proceedings. *See Encogen*, 8 E.A.D. at 250 n.8.

[29] Petitioner suggests that the comment period on the draft permit was insufficient for her to generate a complete set of comments and argues, therefore, that the Board should not deny the Petition based on a finding that the issues therein were not preserved for review. *See* Petition at 31-32; *see also* Reply Motion at 4. However, for the reasons discussed above, we cannot ignore the issue-preservation requirement, nor can we conclude that the permitting authority committed clear error in not providing additional time for public comment where Petitioner has not demonstrated that any request for additional time or other accommodation was ever made. *See* Petition at 31 (indicating that Petitioner did not, during the permitting process, request additional time to prepare comments).

[30] While we need not decide the substantive issue here, we note that EPA's regulations do not identify the Park as a Class I area. *See* 40 C.F.R. § 81.434 (listing the mandatory federal Class I areas in Washington State where visibility has been identified as an important value based on an evaluation of, among other things, "all international parks"). Moreover, neither the statute nor the regulations define the term "international park." *See* 42 U.S.C. § 7472; 40 C.F.R. § 52.21; Petition at 3. Where the Agency encounters ambiguity in the governing statute, the Agency is generally free to adopt any *reasonable* interpretation, even if it is not necessarily the *best* interpretation of the statute. *See Smiley v. Citibank*, 517 U.S. 735, 744-45 (1996); *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837, 843-44 (1984). As Region 10 explains in its Response, the only international park EPA has identified as a Class I area pursuant to the CAA — Roosevelt Campobello International Park in New Brunswick, Canada — has its origin in an international treaty (with the participation of the federal government), is jointly owned by the United States and Canada, and is administered by an international commission created by inter-

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2. *Particulate Matter Issues*

Petitioner argues that EFSEC and Region 10 failed to evaluate comprehensively the PM emissions from the Facility and did not consider adequately the health impacts related to exposure to ambient levels of PM, particularly PM of 10 microns and 2.5 microns or less in diameter ("PM_{10}" and "$PM_{2.5}$," respectively). The Petitioner argues first that the Permit impermissibly equates PM, PM_{10}, and $PM_{2.5}$ emissions for purposes of the BACT and air quality impact analyses in a manner that results in an inadequate assessment of the potential PM emissions impacts. While it is not entirely clear what particular error Petitioner believes the Permit's treatment of PM introduces to the PSD analysis, we interpret the Petition as objecting, in general, to the use of PM as a surrogate for PM_{10} and the use of PM_{10} as a surrogate for $PM_{2.5}$.[31] *See* Petition at 6-9.[32] We believe, however, that

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national treaty. *See* http://www.fdr.net/englishii/; http://www.nps.gov/roca/; *see also* 40 C.F.R. § 81.437 (listing Roosevelt Campobello International Park as a Class I area). This interpretation of the term "international park" distinguishes between a truly international park, like Roosevelt Campobello, and state/provincial parks that merely have some international characteristics.

[31] In particular, Petitioner argues:

> [The Permit] states that, Particulate Matter (PM) and * * * [PM_{10}] shall be considered equal for the permit, and referenced and reported as PM_{10}. * * * There is absolutely no statutory authority for this determination * * * .
>
> The [EPA] literature also discusses PM_{10} and $PM_{2.5}$ separately, especially since $PM_{2.5}$ cannot be filtered by human lungs and therefore is a more serious threat to human health. * * *
>
> * * * *
>
> Absent a federal statute of which Petitioner is unaware, this decision to treat $PM_{2.5}$ as PM_{10} is in complete violation of the * * * Clean Air Act. Factual and legal errors are reviewable by the EAB.

Petition at 6-9. As the Petition addresses both the relationship between PM and PM_{10} and the relationship between PM_{10} and $PM_{2.5}$, we will discuss both issues here.

[32] Petitioner also references certain Congressional findings, *see* Pub. L. 105-178, 112 Stat. 107 (June 9, 1998), and a Presidential Memorandum of July 16, 1997, which, among other things, directed EPA to complete the next periodic review of the PM NAAQS by July 2002 in order to determine whether to revise the PM standard. *See* Petition at 8. Petitioner appears to suggest that the presidential directive requires "EPA and all industrial sources of pollution [to] monitor $PM_{2.5}$ separately" from PM_{10}. *Id.* As Region 10 points out, however, neither the Congressional findings nor the Presidential Memorandum have any direct bearing on the conditions or analyses required in connection with individual PSD permitting decisions; the requirements for PSD permitting are contained in sections 165 and 169 of the CAA and the relevant implementing regulations. *See* 42 U.S.C. §§ 7475, 7479; 40 C.F.R. § 52.21. Moreover, as discussed below, by assuming that all PM from the Facility will be PM_{10} and that all PM_{10} will be $PM_{2.5}$, the materials in the record appear to conservatively estimate potential emissions of both PM_{10} and $PM_{2.5}$, as well as the maximum ambient impact of these emissions.

Petitioner's arguments grow from a misunderstanding about exactly how the underlying PSD analysis considers PM. *See* Reg. Br. at 8-9.

Contrary to Petitioner's suggestion that EFSEC failed to address $PM_{2.5}$, the record includes an evaluation of the proposed Facility's emissions impacts with respect to both PM_{10} emissions and $PM_{2.5}$ emissions. *See* Permit ¶ 8.2.2.; Reg. Ex. B-2 (Technical Support Document for Prevention of Significant Deterioration and Notice of Construction Permit ("TSD")) at 5, 14-15, 22; EFSEC Ex H-2 at 22. As explained in the record, "[p]articulate matter is defined as fine solid or semisolid material smaller than 100 microns in size. PM_{10} is a subset of particulate and is defined as PM smaller than 10 microns in size. [Another] subset of PM is $PM_{2.5}$, which is PM smaller than 2.5 microns in size." TSD at 14.

With respect to PM_{10}, because PM emissions from natural gas-fired combustion units, such as those contemplated for BP's proposed cogeneration plant, tend to be relatively small in size, the Permit assumes that all PM emissions coming from the Facility (i.e., all particulate emissions smaller than 100 microns) will be PM_{10}.[33] *See* TSD at 14; Permit ¶ 8.2.2. In effect, this means that for purposes of both the PM BACT analysis and the ambient impact analysis, EFSEC treated all particulate, whether less than ten microns or not, as if it were PM_{10}, thus potentially over-counting PM_{10} emissions.[34]

With respect to $PM_{2.5}$, in addition to the PM_{10} analysis, the record includes an ambient impact analysis that counts all the PM_{10} emissions from the proposed Facility as $PM_{2.5}$.[35] *See* BP's Response at 9-10; TSD at tbl. 6; EFSEC Ex H-2 at 22. In particular, the ambient air quality analysis evaluates the impact of the proposed Facility's $PM_{2.5}$ emissions, both at the point of maximum impact and in the

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[33] The Permit establishes a PM and PM_{10} BACT limit for combustion turbine emissions of 20.6 lbs/hr (filterable plus condensible PM). Permit Condition 8. The Permit also calculates the Facility's maximum potential annual PM emissions to be 262 tpy. *Id.* at 2 tbl. 1.

[34] As noted above, for this type of unit PM emissions tend to be small so the majority of actual PM emissions are likely to be smaller than ten microns in diameter. *See* TSD at 14.

[35] EPA guidance regarding implementation of the $PM_{2.5}$ NAAQS explains that due to "significant technical difficulties that now exist with respect to $PM_{2.5}$ monitoring, emissions estimation, and modeling * * * , EPA believes that PM_{10} may properly be used as a surrogate for $PM_{2.5}$ in meeting NSR requirements until these difficulties are resolved." *See* Reg. Ex D-4 (Memorandum from John S. Seitz, Interim Implementation of New Source Review Requirements for $PM_{2.5}$ ("NSR Memorandum") at 1. The NSR Memorandum concludes that "it is administratively impracticable at this time to require sources and State permitting authorities to attempt to implement PSD permitting for $PM_{2.5}$. * * * Until these deficiencies are corrected, EPA believes that sources should continue to meet PSD and NSR program requirements for controlling PM_{10} emissions * * * and for analyzing impacts on PM_{10} air quality. Meeting these measures in the interim will serve as a surrogate approach for reducing $PM_{2.5}$ emissions and protecting air quality." *Id.* at 2. Accordingly, the analysis underlying BP's PSD Permit, which specifically addresses both PM_{10} and $PM_{2.5}$, is entirely consistent with relevant Agency guidance.

nearby Canadian portions of the airshed, assuming that all the PM_{10} emissions from the Facility (i.e., all PM emissions) will be $PM_{2.5}$. *See* TSD at tbl. 6; EFSEC Ex H-2, at 22. That is, the analysis estimates the total PM_{10} emissions from the Facility, and rather than treating $PM_{2.5}$ as a smaller subset of PM_{10}, and examining the ambient impact of just that subset, it assumes that the entire quantity of PM_{10} coming from the Facility will also be $PM_{2.5}$. *Id.* Consequently, BP explains, for purposes of this analysis it is very likely to have overestimated the quantity of $PM_{2.5}$ from the Facility, and therefore has conservatively demonstrated that the Facility's impact on ambient $PM_{2.5}$ concentrations will be very small.[36] *See* BP's Response at 10.

In light of the above discussion, at the very least Petitioner has failed to demonstrate why the explanation in the record, and upon which the permitting authority relied in issuing the Permit, is clearly erroneous. The essence of Petitioner's argument is that EFSEC did not evaluate "each type of pollutant," and by failing to do so performed an inadequate review of BP's permit application. *See* Petition at 8. Contrary to Petitioner's suggestion, however, EFSEC's analysis did account for all relevant PM emissions. In fact, by assuming that all PM emissions would be PM_{10} and that all PM_{10} would be $PM_{2.5}$, it performed a more *conservative* analysis, not a more lenient one. While we understand Petitioner's concerns about potential increases in PM emissions attributable to BP's proposed Facility, the concerns raised in the Petition regarding the use of PM as a surrogate for PM10, and the use of PM_{10} as a surrogate for $PM_{2.5}$, appear to be misplaced. In the end, Petitioner's arguments fail to demonstrate clear error on the part of the permitting authority.[37]

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[36] While PM emissions from natural gas fired electric generation plants tend to be small in size, it is not clear from the record that *all* such PM is smaller than 2.5 microns in size. *See* TSD at 14 (stating that "EPA's AP 42 [section 1.4] indicates that almost all PM emissions from gas turbines fired on natural gas are below one micrometer in size"). To the extent that some PM from the Facility is larger than 2.5 microns, by assuming that all PM would be $PM_{2.5}$ BP is likely to have overestimated the amount of $PM_{2.5}$ the Facility will emit.

[37] Petitioner also argues that the permitting authority's failure to adopt permit conditions similar to those adopted by EPA Region 2 in connection with the issuance of a PSD permit to AES Puerto Rico, L.P., constitutes "an unequal administration of the permit process by EPA." Petition at 20 (citing *In re AES Puerto Rico, L.P.*, 8 E.A.D. 324 (EAB 1999)). First, while commenters here raised issues regarding ambient pollution concentrations in general, no commenter suggested that EFSEC was compelled to adopt permit conditions similar to those included in the permit issued to AES Puerto Rico. This issue, therefore, has not been preserved for review. We note, however, that PSD permit decisions depend heavily on site-specific analysis, and this kind of case-by-case decisionmaking inevitably results in substantive differences from permit to permit. *See, e.g., In re Cardinal FG Co.*, 12 E.A.D. 154, 161 (EAB 2005) (explaining that "BACT is a site-specific determination"); *In re Old Dominion Elec. Coop.*, 3 E.A.D. 779, 788-89 (Adm'r 1992) ("PSD permit determinations are made individually under the Act on a case-by-case basis * * * ."). In general, it is insufficient for a petitioner merely to observe that a permit does not include some condition that has been adopted in a permit for some other facility. In this case, the Petition does not include a source-specific assessment

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Petitioner also claims that EFSEC responded inadequately to public comments regarding the potential human health consequences of ambient PM concentrations resulting from the operation of the Facility. Petition at 14. EFSEC responded to public comments regarding the potential health impacts of PM, in part, by stating:

> The impacts of emissions of fine particulate (less than 10 microns in diameter) have been analyzed. Emissions of all regulated pollutants, including particulate matter, have been shown to be well below any applicable protective thresholds, and do not violate national or state ambient air quality standards. Ambient Air Quality Standards are conservatively protective of the environment and human health.

Responsiveness Summary at 5.[38] According to Petitioner, this response "show[s] a gross and blatant disregard for human health." Petition at 14. Petitioner argues more specifically that because there is limited ambient monitoring of $PM_{2.5}$, because Whatcom County is designated as unclassifiable/attainment, because the Canadian $PM_{2.5}$ standard is more stringent than the NAAQS, and because some experts have suggested that the $PM_{2.5}$ NAAQS should be more stringent, that the NAAQS cannot be considered to be conservatively protective of human health, and EFSEC's response to comments therefore "should be declared 'non-responsive.'" Petitioner at 14-18.

Significantly, Petitioner does not appear to challenge EFSEC's conclusion that the Facility's emissions will not cause a violation of the NAAQS or of any air quality increment. Nor does Petitioner raise any particular concerns based on the statutory or regulatory PSD provisions or the accuracy of BP's technical analysis. Rather, it appears that Petitioner is challenging the adequacy of the PM NAAQS itself. Consistent with this understanding, the only statutory authority the Petitioner references (aside from general statements of Congressional purpose) is the portion of the Act relating to EPA's obligation to promulgate NAAQS that are sufficient to protect the public health with an adequate margin of safety. Petition at 19 (referencing 42 U.S.C. § 7409). As we have explained on numerous occasions, the Board "has jurisdiction to review issues directly related to permit conditions that implement the federal PSD program." *In re Sutter Power Plant*,

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demonstrating why the conditions included in the permit issued to AES Puerto Rico are necessary here, and (as discussed above) the record appears to fully support EFSEC's and Region 10's conclusion that the Facility's emissions will not have a significant impact on ambient air quality.

[38] The TSD provides a more complete picture of the underlying PM analysis. *See* TSD at 20-22.

8 E.A.D. 680, 688 (EAB 1999) (citing *Knauf I* at 127). We cannot examine here, however, whether the NAAQS are appropriately stringent in light of the applicable statutory requirements. *See, e.g., In re Tondu Energy Co.*, 9 E.A.D. 710, 715 (EAB 2001) ("As we have repeatedly stated, permit appeals are not appropriate fora for challenging Agency regulations."); *see also In re Woodkiln, Inc.*, 7 E.A.D. 254, 269 (EAB 1997) (same). Thus, to the extent Petitioner requests that we review of the protectiveness of the NAAQS, we must deny that request.[39]

For the reasons discussed above, we deny review as to those issues in the Petition related to the proposed Facility's emissions of PM, PM_{10}, and $PM_{2.5}$.

3. *Ambient Air Quality Modeling*

Petitioner raises two main arguments regarding BP's ambient air quality analysis. First, she argues that the analysis underlying the Permit decision did not adequately consider cumulative impacts from all sources of emissions. *See* Petition at 12. Second, Petitioner argues, more generally, that EFSEC's finding that "'Ambient Air Quality modeling indicates that projected concentrations of pollutants will be below levels that require further impacts analysis or air monitoring' * * * is simply outrageous." *Id*. at 13 (quoting Petition at 3). Petitioner argues further that "[t]he only way that it can be determined that the modeling is accurate is to do air quality monitoring when the co-generation plant is functioning." *Id.*. Petitioner observes that there are few air quality monitors in the region and concludes, based on this argument, that "modeling alone is insufficient" to demonstrate that the severity of the impact of the Facility's emissions. *Id.* at 13-14.

It appears again, however, that the issue raised in the Petition regarding the adequacy of the ambient air quality analysis and the corresponding need for ambient monitoring was not raised with specificity during the comment period on the draft permit. As discussed in Part III.B.1 above, preservation of issues is an important threshold criteria for the Board's consideration of issues in the context of a petition for review. Because this issue was not raised adequately during the comment period or during public hearing, we must deny review of this issue here.[40]

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[39] Similarly, Petitioner raises arguments regarding the factors used to designate attainment area boundaries. *See* Petition at 10 (referencing "a guidance memoranda * * * which listed nine factors to consider in designating appropriate attainment [area] boundaries"). Area designation, however, is not an element of the PSD permitting process. EPA designates areas, by rule, in connection with promulgation and implementation of a NAAQS, and, as discussed above, the Board may not, in the context of a petition for review of a PSD permit, review Agency rulemakings. *See Tondu Energy*, 9 E.A.D. at 715; *Woodkiln*, 7 E.A.D. at 269.

[40] The record does contain comments requesting "that BP and its partners engage the community as equal partners in evaluating in perpetuity the environmental impact of the power plant," by "set[ting] aside a minimum of $50,000 annually to support citizen directed environmental research and

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To the extent the Petition might be construed as raising concerns, in general, about the ambient air quality impact of the proposed Facility's emissions, it appears that some related issues were raised during the comment period,[41] and we address the relevant considerations below.

With respect to ambient air quality impacts, the PSD provisions require a permit applicant to demonstrate that emissions from a new or modified source will not cause or contribute to any air pollution that exceeds the NAAQS or that exceeds an area's maximum allowable increase over baseline concentration (ambient air increment) for any pollutant.[42] *See* 40 C.F.R. § 52.21(k); *see also* 40 C.F.R. § 52.21(c)(ambient air increments). Ambient analysis relies in part on dispersion modeling, which considers factors such as local meteorological conditions and source-specific emission characteristics to estimate maximum ambient air quality impacts. *See* NSR Manual at C.24-.53.[43] A permit applicant may be able to make the required demonstration either by conducting a full ambient impact analysis or by conducting a preliminary analysis demonstrating that the emissions from the proposed source will be sufficiently small to have only minimal impacts on ambient air quality. *See id.*

A full ambient impact analysis includes consideration of the emissions from the proposed source itself, as well as "the estimation of background pollutant con-

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monitoring of the effects of this project on our human and nonhuman ecological communities." Hearing Transcript at 252; *see also* EFSEC Ex C-23, at 2 (Petitioner's January 8, 2004 comments) at 2 (stating that the request for citizen funding should be "seriously considered"). None of the comments suggest, however, that air quality monitoring is required for this particular project because BP's air quality modeling is somehow inaccurate or inadequate. Moreover, EFSEC explained in its response to the comments described above that a PSD Permit is not a vehicle through which a permitting authority may require funding of citizen-directed research or monitoring. *See* Responsiveness Summary at 32. The Petition does not address EFSEC's explanation or otherwise demonstrate why EFSEC's refusal to include such a requirement in the Permit was clearly erroneous.

[41] Several commenters raised general concerns about the Facility's potential impact on ambient levels of PM, PM_{10}, or $PM_{2.5}$, including concerns regarding health impacts from exposure to ambient levels of PM attributable to the proposed Facility. *See* Responsiveness Summary at 14-17, 19, 32, 42 (Comments of Mr. Bernstein, Ms. Delecourt, Ms. Steele-Friedlob, Ms. Steffensen, Ms. Cleveland, and Mr Alesse).

[42] As discussed above, the PSD provisions also require that new sources meet emission limits that constitute BACT. *See* 42 U.S.C. §§ 165(a)(4), 169(3). Petitioner does not argue that the PM emission limits at BP's proposed Facility do not constitute BACT, nor does Petitioner mention BACT in connection with her PM-related arguments.

[43] While the NSR Manual is not accorded the same weight as a binding Agency regulation, the Board has looked to it as guidance in evaluating petitions for review of PSD permits. *See Alaska Dep't. of Envtl. Conservation v. EPA*, 540 U.S. 461, 476 n.7 (2004); *see also In re Milford Power Plant*, 8 E.A.D. 670, 672 n.1 (EAB 1999); *In re Inter-Power of N.Y., Inc.*, 5 E.A.D. 130, 135 n.8. (EAB 1994).

centrations resulting from existing sources," and emissions from "residential, commercial, and industrial growth that accompanies the new activity at the new source or modification." *Id*. at C.24-.25. If, on the other hand, the permit applicant conducts a preliminary analysis that demonstrates that the new source's contribution to ambient concentrations will be below "significant impact levels" specified in EPA guidance, the permitting authority may allow the applicant to forego the full impact analysis. *See* NSR Manual at C.24. Thus, "[t]he results of this preliminary analysis determine whether the applicant must perform a full impact analysis. * * * The EPA does not require a full impact analysis for a particular pollutant when emissions of that pollutant from a proposed source or modification would not increase ambient concentrations by more than prescribed significant impact levels." *Id.* C.24-.25; *see also In re AES Puerto Rico, L.P.*, 8 E.A.D. 324, 331, 343-44 (EAB 1999) (explaining that where "a facility has modeled impacts that are blow the [significant impact levels], that facility is not considered to cause or contribute to a violation of an air quality standard").[44] In such cases, "[t]he reviewer's primary role is to determine whether the applicant selected the appropriate model(s), used appropriate input data, and followed recommended procedures to complete the air quality analysis." NSR Manual at C.25.

In this case, BP conducted preliminary ambient modeling to determine the maximum impact of the Facility's emissions on ambient concentrations of PM (as well as other pollutants).[45] *See* EFSEC Ex H-2 at 20-22; TSD at 21-22; Permit Application at 3.2-12; Revised PSD Application § 7.1. On its face, the preliminary air quality analysis demonstrates that the Facility's contribution to ambient levels of NAAQS pollutants would be less than the applicable significant impact levels specified in EPA guidance.[46] *See* EFSEC Ex H-2 at 21. Based on this mod-

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[44] As relevant here, EPA guidance identifies the following significant impact levels: (1) for SO_2 — 1g/m^3 annual average, 5g/m^3 24-hour average, and 25g/m^3 3-hour average; (2) for PM_{10} — 1g/m^3 annual average, and 5g/m^3 24-hour average; (3) for NO_x — 1g/m^3 annual average; and (4) for CO — 500g/m^3 8-hour average, and 2,000g/m^3 1-hour average. NSR Manual at C.28.

[45] According to the TSD, BP used an EPA-approved computer dispersion model, the Industrial Source Complex model (ISC-Prime), as well as five years of on-site meteorological data, to "determine pollutant concentrations within a 50 kilometer by 50 kilometer area surrounding the project site." TSD at 21; *see also* Permit Application at 3.2-12.

[46] BP explained:

> The results of the dispersion modeling analyses for Class I and Class II pollutant concentrations for each air emission modeled are presented in Tables 7-1 and 7-2 (for Class I and Class II areas, respectively). As can be seen from the tables, no Class I or Class II [significant impact level] is expected to be exceeded under the "worst-case" emission scenarios. No further dispersion modeling is require to demonstrate compliance with air quality standards and PSD increments.

Revised PSD Application § 7.1; *see also* EFSEC Ex A-18 (Dispersion Modeling Protocols); EFSEC Ex A-19 (Modeled Emissions and Results).

eling, EFSEC and Region 10 concluded that BP need not perform a full ambient analysis as otherwise required under EPA's regulations and guidance.

In general, "a petitioner seeking review of issues that are technical in nature bears a heavy burden because the Board generally defers to the [permitting authority] on questions of technical judgment." *In re Carlota Copper Co.*, 11 E.A.D. 692, 708 (EAB 2004); *accord In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005); *In re City of Moscow*, 10 E.A.D. 135, 142 (EAB 2001). Here, however, Petitioner provides no specific demonstration that the permit issuers' conclusions in this regard were clearly erroneous.[47]

While Petitioner raises concerns about the ambient impact of the proposed Facility, she does not argue with any specificity that the ambient modeling was inaccurate or otherwise inadequate for purposes of demonstrating compliance with the PSD provisions, with the possible exception of the following statement:

> The modeling that was done for this permit was only done for what the proposed co-generation plant is "modeled" to pollute, and nothing else. No modeling has been done to include the cumulative effect of all contributing sources of pollution in the area.

Petition at 12.[48] First, as noted above, because BP's preliminary analysis demonstrated that impacts from the proposed Facility would be below significant impact levels, the permitting authority was not obligated to require a full analysis addressing the Facility's emissions in combination with emission from existing sources. Additionally, however, Petitioner's assertion that cumulative effects were not considered is not supported by the record.[49] Indeed, it appears that BP

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[47] We note that the Petition does not specifically challenge the adequacy of the significant impact levels themselves, or the appropriateness of EFSEC's and Region 10's decision to apply them in this particular instance; thus we do not address these issues in this opinion.

[48] We note that the issue of cumulative emissions was raised, at least in concept, during the public comment period. *See* EFSEC Ex C-33 (February 19, 2004 comment letter from Mr. Meyer) ("All of your approvals of the proposed BP plant should add to our air quality total, the polution [sic] generated by the Puget Power plant. That is what we have to breath[e], not just the proposed plant but the sum of the two! Please put that into your calculations."); *see also* Responsiveness Summary at 36 (responding to comment addressing, in part, cumulative impacts).

[49] As BP observes in its brief, and as is evident from our examination of the record, Petitioner's quote of a statement in BP's prepared testimony that the "modeling is for the facility emissions only," was taken out of context and does not in fact support Petitioner's contention that BP or EFSEC ignored cumulative impacts. *See* Petition at 12; BP Br. at 13 n.7; EFSEC Ex H-2 (Applicant's Prefiled Direct Testimony) ("BP's Testimony") at 22 (explaining, in the context of a discussion of the ambient impacts of the proposed Facility, that BP's analysis considered only the emissions from the new cogeneration plant and not the offsetting reductions from taking the boilers off-line).

modeled the proposed Facility's contribution to ambient levels of pollution and considered the impact of the Facility's emissions in light of background pollutant concentrations (originating from other sources of emissions) to derive a total cumulative maximum expected pollutant concentration.

Specifically, BP performed additional computer modeling to determine the overall impact of the proposed Facility on ambient pollutant concentrations both in Washington State and in adjoining areas of Canada. *See* EFSEC Ex H-2 at 21-22; TSD at 21-22. Among other things, these analyses estimated the Facility's maximum contribution to ambient PM_{10} and $PM_{2.5,}$ as well as existing background levels of PM_{10} and $PM_{2.5}$ (i.e., existing contributions from all other sources), and compared the resulting total ambient concentrations to the most stringent applicable federal, State or Canadian standards. *See* EFSEC Ex H-2 at 22; TSD at 22 tbl. 6. In all cases, BP's modeling demonstrated total ambient concentrations of PM (Facility contributions plus background) that were well below the applicable air quality standards. In this way, EFSEC did examine, to some extent, the cumulative impact from multiple sources, even though it appears that this analysis was not required. Petitioner does not specifically address or acknowledge this analysis, and otherwise provides no demonstration that the analysis is flawed.

While Petitioner argues generally that BP's modeling may not be accurate, she raises no specific objections to any particular aspect of BP's modeling exercise or EFSEC's decisionmaking. Accordingly, for the reasons discussed above, Petitioner has not carried her burden to demonstrate clear error on the part of the permitting authority, and we deny review with regard to this issue.

4. *The Area's NAAQS Designation*

Petitioner argues that EFSEC misidentified Whatcom County as being in attainment with the NAAQS, when in fact its NAAQS status is "unclassifiable/attainment." *See* Petition at 9 (citing Permit at 1).[50] Petitioner argues that

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[50] The record does contain a slightly more nuanced discussion of the significance of an area's NAAQS status as it relates to the PSD program:

> Areas are classified on a pollutant-specific basis. Unclassifiable areas are treated as being in attainment until sufficient data are collected to make a determination and the State Implementation Plan (SIP) is amended.
>
> PSD review applies only to sources located in an attainment area or in an area designated as unclassifiable. [Washington State Department of] Ecology officially designates the area around the BP Cherry Point Refinery as being in attainment for all pollutants. No state of Washington designated non-attainment areas exist within 50 kilometers of the project site.

Continued

"[m]isstating the classification for a county is a factual error and factual errors are with[in] the scope of review by the Environmental Appeals Board." *Id*. Region 10 responds that this issue was not raised during the public comment period, that Petitioner fails to demonstrate that the issue was not reasonably ascertainable during the public comment process, and that the Board must therefore deny review. Reg. Br. at 10-12. Based on our examination of the Petition, the public comments, and the Hearing Transcript, we agree with Region 10 that the issue was not previously raised. Moreover, Petitioner does not argue that the issue was not ascertainable during the public comment period, nor is there any obvious reason to conclude that the issue was unascertainable.[51]

As discussed above, in order for an issue to be preserved for Board review, it must have been raised during the public comment period. Because this issue was not raised before the permitting authority we must deny review.

5. *BACT Determination for NO_x*

Petitioner contends that the Facility's Permit should include the 2.0 ppm NO_x limit that Region 10 recommended in its comments on the draft permit. Petitioner states:

> In [its comments], the Environmental Protection Agency [Region 10] recommended that the portion of the draft permit stating that NO_x emissions from each [combustion gas turbine] stack shall not exceed 2.5 parts per million by volume * * *, should be revised to a 2.0 ppm limit. * * * The [EPA] has been charged with the responsibility of limiting pollution and protecting human health * * * . EPA Region 10 recommended that the level of NO_x be reduced to 2.0 ppm and that is what the Permit should indicate. * * * EPA Region 10 did not ensure that something they had clearly indicated should be changed in the permit, was actually changed.

(continued)
Revised PSD Application § 3.3.1.

[51] We note, however, that whether or not some documents in the record identified Whatcom County's NAAQS status as "attainment" instead of "unclassifiable/attainment," the required PSD analysis is the same. While areas designated as "nonattainment" are subject to a substantively different permitting process (i.e., nonattainment new source review), the PSD requirements for attainment areas are the same as the PSD requirements for unclassifiable areas. Petitioner here does not point to any substantive deficiency in the Permit resulting from the alleged misstatement in the record. Indeed, because attainment and unclassifiable areas are treated identically in the PSD permitting process, there is no reason to expect that the alleged misidentification would result in a substantive deficiency in the Permit.

Petition at 23-24. Petitioner alternately identifies this as a "policy decision" and a "factual error," *Id.* at 24-25, and suggests that by allowing the 2.5 ppm NO_x limit to remain in the Permit Region 10 "did not advocate protecting the public health as they are required to do," Petition at 27. Petitioner concludes, without substantive analysis, that "[t]here is absolutely no reason that the Cherry Point co-generation plant cannot comply with the 2.0 ppm NO_x limitations like many others are doing."[52] *Id.*

As discussed above, in general, the statute and PSD regulations require that a permit incorporate emission limits that reflect application of BACT. *See supra* note 11 and accompanying text. In practice, permitting authorities often require a permit applicant to incorporate the most stringent emission limits that have been adopted in recent permits for comparable sources, unless the permitting authority concludes that source-specific factors make compliance with such limits infeasible. *See* NSR Manual at B.23-B.24 ("The EPA does not expect an applicant to necessarily accept an emission limit at BACT solely because it was required previously of a similar source type. While the most effective level of control must be considered in the BACT analysis, different levels of control for a given control alternative can be considered. For example, the consideration of a lower level of control for a given technology may be warranted in cases where past decisions involved different source types * * * [or where] other considerations show the need to evaluate the control alternative at a lower level of effectiveness."). Thus, while guided by nationwide trends in air pollution control efficiency, BACT analysis is, at its core, a source-specific exercise. *See In re Cardinal FG Co.*, 12 E.A.D. 154, 161 (EAB 2005) ("BACT is a site-specific determination resulting in the selection of an emission limitation that represents application of control technology appropriate for the particular facility.") (citing *In re Three Mountain*

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[52] Petitioner does note that one element of BP's explanation for why the Facility cannot meet a 2.0 ppm NO_x standard involves steam demand variability related to "flare control." Petition at 26. She then observes that "the refinery does not always control their flare" and provides an anecdotal description of flare events at the refinery. Petitioner observes also that, in another case a different and unspecified permitting authority "did not think that the start-up and shut-down of the turbines was a valid factor for asking for the 2.5 [ppm NO_x] BACT because power plants are exempt from the NO_x emissions control limits during start-up and shut-downs." *Id.* As to the first point, while Petitioner notes that flares do occur, she does not provide a sufficiently detailed analysis for us to conclude that flare control activities at the refinery do not affect steam demand as BP describes. As to the second point, it appears that although the Responsiveness Summary lists "startup and stopping turbines" as one of five considerations supporting the adoption of a 2.5 ppm NO_x limit, this discussion is actually referring to turbines at BP's refinery (that affect steam demand) and not the Facility's combustion turbines. *See* Responsiveness Summary; EFSEC Ex C-32, at 4 (explaining that the refinery uses steam in two ways including "to run turbines that drive pumps and compressors"). In fact, the NO_x limit does not consider emissions increases during start-up and shut-down of the Facility's turbines. *See* Responsiveness Summary at 9 (indicating that the analysis of NO_x emissions excludes NO_x events "above 5 ppm given that such concentrations are the result of startup or shutdown conditions during which the 2 ppm or 2.5 ppm NO_x emission limitation is relieved").

Power, LLC, 10 E.A.D. 39, 47 (EAB 2001); *Knauf I,* 8 E.A.D. 121, 128-29 (EAB 1999)).

Here, while the draft permit included a 2.5 ppm NO_x limit, and Region 10 pointed out that some recently permitted similar sources had adopted a more stringent NO_x limit of 2.0 ppm, the record contains a detailed discussion regarding why EFSEC and Region 10 concluded that the more stringent 2.0 ppm limit would be inappropriate for the Facility based on source-specific considerations. Among other things, the record includes the following discussion:

> Although the BP Cogeneration Project's CTs [combustion turbines] and DBs [duct burners] are similar to the [other] emission units listed [in the record] * * * the [Facility's] CTs and DBs will experience operating conditions not seen at the[se] facilities * * * . Like other combined cycle cogeneration projects, the [Facility] will supply electricity to the grid and steam to customers. The fact that the [Facility's] customer is the BP Cherry Point Refinery is significant.
>
> The BP Cherry Point Refinery is a complex petroleum refinery with several process units and the third largest refining capacity (225,000 barrel-per-day) on the West Coast. Refinery steam demand variability is caused by the following: (1) process adjustment, process control, crude and product changes; (2) startup and stopping turbines; (3) batch cycle coker operation; (4) calciner shutdown; and (5) flare control. The levers for refinery steam header pressure control include: (1) CT load; (2) high pressure steam bypass to refinery process units (bypass steam turbine); (3) DB firing; (4) refinery boilers; and (5) combinations of the above. The goal is to maintain a constant (changes no greater than 1-2 psi per minute) refinery steam header pressure even through wide swings in steam flow.
>
> The [Facility's] CTs and DBs will be fired under variable load conditions to adjust for continuous swings in steam demand across multiple process units at the BP Cherry Point Refinery. Variable DB and CT firing rates will generate greater NO_x emissions (exit gas NO_x concentrations) and therefore limit the [Facility's] ability to reduce emissions below 2 ppm NO_x. Stand-alone combined cycle power generation plants and cogeneration facilities with more predictable and steady-state steam loads simply en-

> joy more favorable operating conditions to control NO_x emissions below 2 ppm.

Responsiveness Summary, at 8. Based on these considerations, which were outlined in some detail in the record, EFSEC and Region 10 were "not confident that BP Cogeneration will be able to achieve continuous compliance with a 2 ppm NO_x emission limit even after employing the state-of-the-art SCR system." *Id*. at 11; *see also* Responsiveness Summary 5-13; EFSEC Exs C-26, C-32 (addressing why a 2.5 ppm NO_x limit is appropriate in this instance). Consequently, the Permit retained the proposed 2.5 ppm NO_x emission limitation.

This is precisely the kind of analysis that a permitting authority may rely upon to demonstrate that a less stringent emission limit is appropriate as BACT. Accordingly, in order to obtain review, Petitioner must demonstrate that the rationale underlying the decision of the permitting authority was clearly erroneous. Here, Petitioner argues, in essence, that EFSEC was required to impose a 2.0 ppm NO_x limit based on Region 10's comments on the draft permit because of Region 10's role as the primary source of federal regulatory authority. *See* Petition at 24. This argument ignores entirely the technical rationale relied upon by both EFSEC and Region 10 in adopting the 2.5 pmm NO_x limit.[53]

As explained in Part III.A above, the burden is on the Petitioner to demonstrate clear error on the part of the permitting authority. Additionally, where the dispute involves matters of a technical nature, the burden on petitioners is particularly heavy. *See In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33-34 (EAB 2005) ("Where a permit decision pivots on the resolution of a genuine technical dispute or disagreement, the Board prefers not to substitute its judgment for the judgment of the decisionmaker specifically tasked with making such determinations in the first instance."); *In re Carlota Copper Co.*, 11 E.A.D. 692, 708 (EAB 2004) (explaining that "a petitioner seeking review of issues that are technical in nature bears a heavy burden because the Board generally defers to the Region on questions of technical judgment."); *In re City of Moscow*, 10 E.A.D. 135, 142 (EAB 2001) (same). This demanding standard serves an important function within the framework of the Agency's administrative process; it ensures that the locus of responsibility for important technical decisionmaking rests primarily with the permitting authority, which has the relevant specialized expertise and experience. Here, because Petitioner has not met this burden, we deny review as to this issue.

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[53] Petitioner also suggests that to the extent BP and Region 10 met to discuss the NO_x limit "someone should have been there to advocate [on behalf of] the public's health since EPA was not doing so." Petition at 27. However, Petitioner points to nothing in the Act or EPA's regulations that preclude EPA from meeting with a PSD permit applicant for the purpose of gathering additional information or clarifying information already in the record. *See, e.g.*, 40 C.F.R. § 124.18 (providing for the addition of "new material" to the record in connection with responses to comments).

6. *The BP-British Columbia MOU*

Finally, Petitioner argues that the MOU between BP and the government of British Columbia was erroneously excluded from the administrative record for the PSD Permit. Petition at 29-30. The MOU embodied certain agreements between BP and the Canadian Provincial Government regarding information that BP would share with the Province of British Columbia related to CO mitigation and PM_{10}. *See* Region 10 Br. at 19 n.11. It is unclear to us how this material affects any condition of the PSD Permit or the underlying decisionmaking process of the permitting authority, and the Petitioner does not provide any explanation of how the MOU relates to or affects the PSD Permit. While the record for a PSD permit must include all material that a permitting authority relied upon in making its permitting decision, here there is no suggestion that either EFSEC or Region 10 relied on the MOU with regard to any aspect of BP's PSD Permit. We note further that the MOU was a private agreement between BP and the Province of British Columbia to which EFSEC and Region 10 were not parties and, to our knowledge, there is nothing on the face of the Permit, or elsewhere in the record, that suggests EFSEC's or Region 10's permitting decision were in any way affected by the MOU.

Because Petitioner's mere observation that the MOU was not in the administrative record for the PSD permit does not itself demonstrate clear error on the part of the permitting authority, we deny review of this issue.

IV. *CONCLUSION*

For the reasons discussed above, we deny review as to each issue raised in the petition for review of the PSD permit issued jointly by Region 10 and EFSEC for BP's proposed co-generation plant in Whatcom County, Washington. In accordance with 40 C.F.R. § 124.19(f)(2), the Regional Administrator of EPA Region 10 (or his delegate) shall promptly publish in the Federal Register a notice of final agency action.

So ordered.