IN RE ENCOGEN COGENERATION FACILITY

PSD Appeal Nos. 98–22 through 98–24

ORDER DENYING REVIEW

Decided March 26, 1999

Syllabus

Before the Board are three petitions seeking review of certain conditions of a Prevention of Significant Deterioration ("PSD") permit (the "Permit") granted by the State of Hawaii Department of Health ("DOH"). The Permit was issued to Encogen Hawaii, L.P. ("Encogen") and would authorize Encogen to construct a 65–megawatt ("MW") cogeneration facility (the "Station") in Honokaa on the Big Island of Hawaii. Both DOH and Encogen have filed responses to the petitions, arguing that the petitions fail to meet the minimal pleading requirement that they demonstrate that the issues raised in the petitions were first raised during the public comment period. In addition, both Encogen and DOH argue that the petitions fail to show that DOH's decision to issue the Permit was clear error.

Held: (1) The Board will not consider issues that the Petitioners have failed to show were raised during the public comment period, and the Board will not consider issues that the Petitioners have not shown fall within the Board's jurisdiction over PSD permit decisions.

(2) Petitioners' argument that the Permit should restrict Encogen's ability to apply in the future for a modification of the Permit's fuel restrictions is rejected because the regulations do not require that future operational changes, which will require modification of a permit, be considered as part of the initial application process.

(3) Petitioners have failed to show clear error in (a) DOH's decision not to require Encogen to provide notice of changes in fuel-use among three authorized fuels and (b) DOH's decision not to limit fuel bound nitrogen content and the water-to-fuel ratio where DOH has determined that other permit conditions meet BACT requirements for control of nitrogen oxides. In addition, Petitioners' request for review of the authorization to use three different fuel types is rejected because Petitioners have not shown that any differences between the various fuel types would result in emissions greater than those modeled by DOH using what it determined to be "worst-case" conditions.

(4) Petitioners' argument that additional measures must be taken to reduce lead emissions is rejected because the potential lead emissions do not exceed the applicable PSD significance level and no exceedence of air quality standards is predicted by modeling undertaken pursuant to the regulations. Although the Petitioners have shown that DOH miscalculated the worst-case lead emissions in the chart showing the Station's PSD significant emissions, the corrected emissions level shown by the Petitioners (and conceded by DOH) does not exceed the applicable PSD significance level.

(5) The Petitioners' request for review of DOH's decision not to require on-site monitoring of background ambient air pollution concentrations, but instead to accept off-site data, is rejected because the Petitioners' argument does not show that DOH's response to comments is inadequate or that the off-site background data are not sufficiently conservative as to be reliable. The use of background data with higher pollution concentrations, in essence, provides an additional margin of safety for future air quality at the site.

(6) The Petitioners' request for review of DOH's analysis of secondary emissions is rejected because the Petitioners' arguments do not identify secondary emissions that are specific, well-defined and quantifiable.

Before Environmental Appeals Judges Scott C. Fulton, Ronald L. McCallum and Edward E. Reich.

Opinion of the Board by Judge Fulton:

Before the Board are three petitions seeking review of certain conditions of a Prevention of Significant Deterioration ("PSD") permit, Permit No. 0243–01–C (the "Permit"), granted by the State of Hawaii Department of Health ("DOH").[1] The Permit was issued to Encogen Hawaii, L.P. ("Encogen"). We have consolidated for decision the petitions for review (collectively, the "Petitions") filed by David A. Caccia ("Mr. Caccia"), Ada Lamme ("Ms. Lamme") and Cary Hoepker ("Mr. Hoepker") (collectively, the "Petitioners"). For the reasons explained below, we deny the Petitions.

I. *BACKGROUND*

A. *Statutory and Regulatory Background*

The Clean Air Act ("CAA") established the PSD program to regulate air pollution in certain areas, known as "attainment" areas, where air quality meets or is cleaner than the national ambient air quality standards ("NAAQS"), as well as areas that cannot be classified as "attainment" or "non-attainment" ("unclassifiable" areas). CAA §§ 160 *et seq.*, 42 U.S.C. §§ 7470 *et seq.; see In re EcoElectrica, L.P.,* 7 E.A.D. 56, 59 (EAB 1997); *In re Commonwealth Chesapeake Corp.,* 6 E.A.D. 764, 766–67 (EAB, Feb. 19,

[1] DOH administers the PSD program in Hawaii pursuant to a delegation of authority from U.S. EPA Region IX (the "Region"). Because DOH acts as EPA's delegate in implementing the federal PSD program within the State of Hawaii, the Permit is considered an EPA-issued permit for purposes of federal law, and is subject to review by the Board pursuant to 40 C.F.R. § 124.19. *In re Kawaihae Cogeneration Project,* 7 E.A.D. 107, 109 n.1 (EAB 1997); *In re Commonwealth Chesapeake Corp.,* 6 E.A.D. 764, 765 n.1 (EAB 1997); *In re West Suburban Recycling & Energy Ctr.,* L.P., 6 E.A.D. 692, 695 n.4 (EAB 1996).

1997). The NAAQS are "maximum concentration 'ceilings'" for particular pollutants, "measured in terms of the total concentration of a pollutant in the atmosphere." U.S. EPA Office of Air Quality Planning, New Source Review Workshop Manual ("Draft Manual")[2] at C.3. NAAQS have been set for six criteria pollutants: sulfur oxides,[3] particulate matter,[4] nitrogen dioxide ("NO_2"), carbon monoxide ("CO"), ozone ("O_3"), and lead. *See* 40 C.F.R. §§ 50.4–.12. The Island of Hawaii is located in an area designated attainment or unclassifiable for meeting NAAQS for sulfur oxides, particulate matter, CO, NO_2 and O_3. 40 C.F.R. § 81.312.

In order to prevent violations of the NAAQS and, generally, to prevent significant deterioration of air quality, the PSD regulations require that new major stationary sources be carefully reviewed prior to construction to ensure that emissions from such facilities will not cause or contribute to an exceedence of the NAAQS or applicable PSD ambient air quality "increments." 40 C.F.R. §§ 52.21 *et seq.* A PSD "increment" refers to "the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant." Draft Manual at C.3; *see also* 40 C.F.R. § 52.21(c) (establishing increments for regulated pollutants).

The PSD requirements are pollutant-specific, which means that a facility may emit many different air pollutants, but, depending upon a number of factors, including the amount of emissions of each pollutant by the facility, less than all of those pollutants may be subject to the PSD permit requirements. *In re Hawaii Elec. Light Co.,* 8 E.A.D. 66, 72 (EAB 1998); Draft Manual at 4. In particular, PSD review is generally required for those pollutants regulated by the CAA that a new major stationary source has the potential to emit at rates equal to or in excess of the thresholds for "significant" emissions specified in 40 C.F.R. § 52.21(b)(23). In addition to the six criteria pollutants, other regulated pollutants for

---

[2] The Draft Manual was issued as a guidance document for use in conjunction with new source review workshops and training, and to guide permitting officials with respect to PSD requirements and policy. Although it is not accorded the same weight as a binding Agency regulation, the Draft Manual has been considered by this Board as a statement of the Agency's thinking on certain PSD issues. *See, e.g., In re Hawaii Elec. Light Co.,* 8 E.A.D. 66, 72 n.7 (EAB 1998); *EcoElectrica,* 7 E.A.D. at 59 n.3; *In re Masonite Corp.,* 5 E.A.D. 551, 558 n.8 (EAB 1994).

[3] Sulfur oxides are to be measured in the air as SO_2. 40 C.F.R. § 50.4(c).

[4] For purposes of determining attainment of the NAAQS, particulate matter is to be measured in the ambient air as particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers ("PM_{10}"). 40 C.F.R. § 50.6(c).

which a "significant" rate has been established and that are relevant to this case are volatile organic compounds ("VOCs"),[5] arsenic and benzene.

An ambient air quality and source impact analysis, conducted pursuant to the regulatory requirements of 40 C.F.R. § 52.21(k), (l) and (m), is the central means for determining at the preconstruction stage whether the NAAQS or PSD increment will be exceeded by a new major stationary source. The CAA and the PSD regulations also require that new major stationary sources employ the "best available control technology," or BACT, to minimize emissions of pollutants that may be emitted by the new source in amounts greater than the applicable "significant" levels established by the regulations. 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(j)(2). The requirements of preventing violations of the NAAQS and the applicable PSD increments, and the required use of BACT to minimize emissions of air pollutants, are the core of the PSD regulations. Draft Manual at 5; *accord In re Hawaii Elec.,* 8 E.A.D. at 73.

B. *Factual and Procedural Background*

The Permit was issued by DOH on June 8, 1998, and would authorize Encogen to construct a 65–megawatt ("MW") cogeneration facility in Honokaa on the Big Island of Hawaii (the "Station"). The Station, which will consist of two 23–MW combustion turbines, two unfired heat recovery steam generators and a 19–MW steam turbine generator, will have the potential to emit pollutants in amounts sufficient to classify it as a new major stationary source. DOH, Ambient Air Quality Impact Report (Mar. 31, 1998) ("AAQ Report") at 4–5. As a result, DOH determined that PSD review is required for the following pollutants, which the Station has the potential to emit at rates equal to or in excess of the applicable "significant" thresholds: NO_x, SO_2, CO, particulate matter, VOC, arsenic and benzene. AAQ Report at 7.[6]

Encogen submitted its initial application for a PSD permit in December 1994. DOH prepared a draft permit in February 1997, and, in April 1997, DOH prepared an ambient air quality impact report for the

[5] The term "volatile organic compounds" is defined at 40 C.F.R. §§ 51.100(s), 52.21(b)(30).

[6] The Petitioners appear to misunderstand the regulatory ramifications that flow from a predicted exceedence of a PSD threshold for "significant" emissions. They appear to argue that the admitted exceedence of an applicable significance threshold implies that the facility would *violate* the PSD requirements. *See, e.g.,* Hoepker Pet. at 7; Caccia & Lamme

Continued

Station. Certified Index to the Administrative Record at 4. The public was given notice and an opportunity to comment on the draft permit between April 8, 1997, and May 10, 1997. A public hearing was held on May 8, 1997. DOH prepared a summary of the comments received during the comment period and provided written responses to those comments. *See* Summary of Public Comments Received on the Draft Covered Source Permit for Encogen Hawaii, L.P. Cogeneration Facility Located at the Former Hamakua Sugar Mill, Haina, Hawaii ("DOH's Response to Comments"). DOH determined that the Station will not cause or contribute to an exceedence of the applicable NAAQS and PSD increments and that the Station, as designed, will use BACT for all pollutants that the Station has the potential to emit in regulatory significant amounts. AAQ Report at 27.

Thereafter, DOH submitted the Permit to U.S. EPA Region IX,[7] and in May 1998 the Region concurred in the issuance of the Permit. Certified Index to the Administrative Record at 6. In June 1998, DOH issued its decision to grant the Permit and, thereafter, the Petitioners filed their Petitions requesting that this Board review various aspects of DOH's permitting decision.

II. *DISCUSSION*

The Petitions of Mr. Caccia and Ms. Lamme are virtually identical. In essence, they question whether DOH properly determined that the Station will not cause or contribute to an exceedence of the NAAQS or PSD increments, and whether DOH correctly determined that the Station will comply with the BACT requirements. Mr. Hoepker's petition, which is more detailed than the petitions filed by Mr. Caccia and Ms. Lamme, raises many of the same issues identified by Mr. Caccia and Ms. Lamme, but also raises several additional issues.

Pets. at 2. However, such is not the case. The term "significant" in this context has a very specific meaning defined by the regulations at 40 C.F.R. § 52.21(b)(23). Exceedence of the PSD significance levels set forth in 40 C.F.R. § 52.21(b)(23) simply triggers the requirement that a source apply for a PSD permit, as set forth in the regulations.

[7] Pursuant to the Region's delegation agreement with Hawaii, the Region retains the authority to concur on DOH's determinations of what constitutes "best available control technology" for the control of regulated pollutants in PSD permits issued by DOH, and to concur on DOH's evaluation of air impact modeling analyses. Amended Delegation Agreement, 54 Fed. Reg. 23,978 (June 5, 1989).

Both DOH and Encogen have filed responses to the Petitions. *See* Encogen Hawaii, L.P.'s Brief in Opposition to Petitions for Review ("Encogen's Brief"); State of Hawaii Department of Health's Response to Petitions for Review ("DOH's Brief"). Both Encogen and DOH object to the Petitions on the ground that they fail to meet the minimal pleading standard of demonstrating that the issues raised in the petitions were first raised during the public comment period. In addition, both Encogen and DOH provide detailed arguments on the merits of each issue, explaining why the Petitions fail to show that DOH's decision to issue the Permit was clear error. Mr. Caccia has filed a reply to the responses filed by DOH and Encogen. *See* Letter from David A. Caccia to the Environmental Appeals Board (Sept. 17, 1998) ("Mr. Caccia's Reply").

For the reasons stated below, we conclude that the Petitioners have failed to sustain their burden of showing that review by this Board is warranted.

A. *Threshold Pleading Requirements*

The Board's review of PSD permitting decisions is governed by 40 C.F.R. part 124. *Commonwealth Chesapeake Corp.,* 6 E.A.D. 764, 769 (EAB 1997) (quoting *In re Envotech, L.P.,* 6 E.A.D. 260, 265 (EAB 1996)). The Board's role "is to consider issues raised in petitions for review that pertain to the PSD program and that meet the threshold procedural requirements of the permit appeal regulations." *In re Knauf Fiber Glass,* GmbH, 8 E.A.D. 121, 126 (EAB 1999). At all times, the Board's approach 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 Regional [State] level." 45 Fed. Reg. 33,412 (May 19, 1980); *accord Kawaihae Cogeneration,* 7 E.A.D. at 114.

Although the Board broadly construes petitions like these, filed without the apparent aid of legal counsel, *Envotech,* 6 E.A.D. at 268, the burden of demonstrating that review is warranted nonetheless inevitably rests with the petitioner challenging the permit decision. 40 C.F.R. § 124.19(a); *accord, e.g., Kawaihae Cogeneration,* 7 E.A.D. at 114; *EcoElectrica,* 7 E.A.D. at 61; *Commonwealth Chesapeake,* 6 E.A.D. at 769. Significantly, the petition must contain "a demonstration that any issues being raised were raised during the public comment period." 40 C.F.R. §§ 124.13, 124.19(a); *accord In re Puerto Rico Elec. Power Auth.,* 6 E.A.D. 255, 255

(EAB 1995).[8] The effective, efficient and predictable administration of the permitting process demands that the permit issuer be given the opportunity to address potential problems with draft permits before they become final. *See Kawaihae Cogeneration,* 7 E.A.D. at 114. In the present case, the Petitioners have failed to show that a number of the issues over which they now seek review were raised during the public comment period.

The only demonstration made by the Petitioners that any of their issues were properly raised during the public comment period consists of occasional references to the summary of the public comments set forth in DOH's Response to Comments.[9] Accordingly, we will not consider arguments or issues raised in the Petitions, unless those issues or arguments were described in DOH's Response to Comments as having been raised during the public comment period.[10] For this reason, we will not consider the following issues raised by the Petitioners: issues regarding the impact of agricultural burning on the background air quality (Caccia & Lamme Pets. at 1; Hoepker Pet. at 3); visibility as an indication of air quality (Caccia & Lamme Pets. at 1; Mr. Caccia's Reply at 1); whether Honokaa is allegedly a "non-attainment" area for certain periods of the year (Caccia & Lamme Pets. at 1);[11] any exceedence of the PSD increment for sulfur dioxide allegedly shown by Table 8 of the AAQ Report (Hoepker Pet. at 6–9); alleged impacts of the Station on drinking water,

---

[8] Alternatively, a petitioner may demonstrate that the issue over which review is sought was not reasonably ascertainable during the public comment period. *See, e.g., In re Keystone Cogeneration Sys.,* 3 E.A.D. 766 (Adm'r 1992). None of the Petitioners has argued that review should be granted under this alternative standard.

[9] In particular, Mr. Caccia stated that "[s]ince we are required to limit ourselves to issues that were raised in the public comment period, we addressed and identified by page number issues in the 'Summary of Public Comments.'" Mr. Caccia's Reply at 1.

[10] It is not incumbent upon the Board to scour the record to determine whether an issue was properly raised below: this burden rests with Petitioners. *See In re Essex County (N.J.) Resource Recovery Facility,* 5 E.A.D. 218, 224 (EAB 1994) (denying review where response to comments failed to show that issue was raised during public comment period); *In re Inter-Power of New York, Inc.,* 5 E.A.D. 130, 152 (EAB 1994).

[11] Mr. Caccia and Ms. Lamme contend that the area to be impacted by emissions from the facility is not in attainment and that the Lowest Available Emissions Rate, or "LAER," not BACT, is required for control of emissions from the Station. As noted above, Hawaii is classified as attainment or unclassifiable, thereby making the PSD and BACT requirements applicable. Reclassification of an area from attainment or unclassifiable to non-attainment may not be addressed in a PSD permit proceeding such as this case. CAA § 164, 42 U.S.C. § 7474; 40 C.F.R. § 52.21(g); *accord In re Hawaii Elec. Light Co.,* 8 E.A.D. 66, 73, n.10 (EAB 1998). Thus, even if this issue had been raised in the permit proceeding, it would not be reviewable in this case.

soils, vegetation, agriculture, bee keeping, ranching, and the astronomical observatory (Hoepker Pet. at 7–9); issues regarding beryllium, benzene and arsenic emissions (Hoepker Pet. at 7; Caccia and Lamme Pets. at 1–2); alleged atrazine pollution in the ground water to be used by Encogen as a coolant (Hoepker Pet. at 10–11); and the impacts of any pollution from the Station on the Hawaiian hawk, Hawaiian bat, Hawaiian duck, and the damsel fly as endangered species.[12] The Petitioners have not demonstrated that these issues were raised during the public comment period. Indeed, Mr. Caccia filed a reply to the responses of Encogen and DOH, but did not provide any additional citations showing that any of these issues were raised during the public comment period.[13]

B. *The Petitioners Have Not Shown that DOH's Responses to Comments Were Inadequate on the Issues That Were Raised During the Public Comment Period.*

A decision to issue a PSD permit will ordinarily not be reviewed unless the decision is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a); *accord, e.g., In re Kawaihae Cogeneration Project,* 7 E.A.D. 107, 113–14 (EAB 1997); *In re EcoElectrica,* L.P., 7 E.A.D. 56, 60–61 (EAB 1997); *Commonwealth Chesapeake,* 6 E.A.D. at 769. In order to establish that review of a permit is warranted, a petitioner must, pursuant to section 124.19(a), both state the objections to the permit that are being raised for review and explain

[12] Mr. Hoepker refers to paragraph C.5 of DOH's Response to Comments to show that these issues were raised. Hoepker Pet. at 5. However, that paragraph merely summarizes the public comment as having stated that DOH's conclusion of no impact on endangered species "is misleading to say the least." DOH's Response to Comments at 7. Apparently, during the public comment period, no specific endangered species were identified and no evidence was submitted showing that such species will be impacted by the Station. In addition, DOH consulted with, and relied upon the judgment of, the U.S. Fish and Wildlife Service, which determined that there are no threatened, endangered, or candidate species that occur in the project area. DOH's Response to Comments at 7. Where, as here, an issue is raised only generically during the public comment period, the permit issuer is not required to provide more than a generic justification for its decision, and the petitioners cannot raise more specific concerns for the first time on appeal. *Knauf,* 8 E.A.D. at 148.

[13] Contrary to Mr. Caccia's argument in his Reply, the requirement that all ascertainable issues be raised during the public comment period is not a mere technicality, *see* Mr. Caccia's Reply at 1, but instead is a regulatory requirement serving the important policy functions discussed above. *See* 40 C.F.R. §§ 124.13, 124.19(a).

why the permit decision maker's previous response to those objections (i.e., the decision maker's basis for the decision) is clearly erroneous or otherwise warrants review. *See Kawaihae Cogeneration,* 7 E.A.D. at 114; *see also In re Puerto Rico Elec. Power Auth.,* 6 E.A.D. 253, 255 (EAB 1995); *In re Genesee Power Station, L.P.,* 4 E.A.D. 832, 866 (EAB 1993). The burden is on the petitioner to demonstrate that the permit issuer's responses to comments were inadequate. *In re GMC Delco Remy,* 7 E.A.D. 136, 141 n.14 (EAB 1997); *In re Exxon Co.,* U.S.A., 6 E.A.D. 32, 38–39 (EAB 1995).

As discussed below, with respect to the issues raised by the Petitioners during the public comment period, the Petitioners have not shown that DOH's responses to these comments were inadequate or that the basis for DOH's decision was clearly erroneous.

1. *BACT Requirements*

In this part, we discuss issues raised by the Petitioners relating to DOH's BACT conclusions.

a. *BACT for SO_2 — Fuel Restrictions*

The Permit authorizes Encogen to fire the turbine generators on naphtha fuel, low sulfur fuel oil ("LSFO"), and gasoline. Permit § C.1.d.1. The maximum sulfur content of any fuel, however, is required by the Permit not to exceed 0.05% by weight. *Id.* This fuel restriction was determined to meet or exceed the BACT requirements for SO_2. AAQ Report at 14. The Petitioners raise two issues regarding this fuel restriction, neither of which warrant granting review of DOH's permitting decision.

First, the Petitioners contend that the fuel restrictions should be made more stringent to bar Encogen from applying for a modification of the Permit to authorize use of more polluting fuels. Caccia & Lamme Pets. at 2; Hoepker Pet. at 10. The Petitioners' arguments, however, do not show any error in DOH's Response to Comments.

DOH stated in its Response to Comments as follows:

> The facility is permitted to burn only naphtha, gasoline and low sulfur diesel no.2 as fuel. If the permittee intends to burn any other fuel, Department approval is required before a different fuel can be burned. If the new alternate fuel will increase pollution levels, the applicant will be required to go through the permitting modification

> process, including a public comment period, to obtain approval.

DOH's Response to Comments at 14. This response adequately explains why the comments were rejected. The regulations do not require that future operational changes, which require modification of a permit, be considered as part of the initial application process. *See Knauf,* 8 E.A.D. at 160–61; *Puerto Rico Elec.,* 6 E.A.D. 258 ("any consideration of what [the permittee] might or might not do in terms of future expansion of the facility is premature and not appropriate for consideration in this proceeding."). Accordingly, the Petitioners have not shown that DOH's Response to Comments was inadequate regarding a possible future modification application.

Second, Mr. Hoepker seeks review of DOH's deletion of a permit condition regarding notification of changes in the type of fuel being used. The draft permit contained a condition requiring Encogen to notify DOH each time Encogen switches the fuel it uses among the different authorized fuels. During the public comment period, DOH received a comment requesting that this notification requirement be deleted on the grounds that the limitation on sulfur content of the different fuels obviates any need for such notification. DOH's Response to Comments at 4. DOH responded to this comment by deleting the notification requirement, stating that it agreed with the comment. *Id.* at 4–5.

Mr. Hoepker now objects to DOH's deletion of this permit condition, arguing that DOH did not provide a scientific basis for its decision. Mr. Hoepker argues that deletion of the condition "will provide opportunities for Encogen to alternate fuels that may not meet permit guidelines (*e.g.* high sulfur)." Hoepker Pet. at 2. Without greater specificity, such speculation is not a sufficient basis for us to grant review. *In re Colmac Energy, Inc.,* 2 E.A.D. 687, 689 (Adm'r 1988) ("Petitioners have not established that their concerns are anything other than speculative, which is not a sufficient basis to justify exercise of the review powers under the applicable regulations."). Mr. Hoepker has simply not shown that frequent switching between the authorized fuels will result in emissions greater than those contemplated by the AAQ Report.[14] Accordingly, Mr. Hoepker's arguments fail to demonstrate that DOH's deletion of the fuel-switch notification requirement was clear error, and review is therefore denied.

---

[14] This is particularly true since a violation of the Permit's conditions restricting fuel use will expose Encogen to possible enforcement action including, among other things, the assessment of civil penalties.

b. *BACT Is Not Required for Lead Emissions*

DOH determined that BACT would not be required to control lead emissions. AAQ Report at 7 (identifying the pollutants with potential to be emitted in amounts greater than the significant thresholds). Mr. Caccia and Ms. Lamme argue that DOH's conclusion is not supported because it is based upon a modeling of lead emissions from burning of only naphtha, not gasoline. Caccia & Lamme Pets. at 1. They argue that, although burning of naphtha will produce lead emissions of only 0.11 tons per year as projected by DOH,[15] burning gasoline will produce substantially greater lead emissions of 0.22 tons per year. *Id.* The Petitioners argue that this error is important because "any amount of lead in the air will have an impact on the IQ of our children. Whatever it takes to remove the lead should be done, regardless of the cost." *Id.* at 1–2.

DOH has admitted in its Brief that the Petitioners are correct that it miscalculated the worst-case lead emissions as shown in Table 1 of the AAQ Report. DOH's Brief at 22. DOH further concedes that Petitioners are correct that worst-case lead emissions will be 0.22 tons per year, not the 0.11 tons shown on Table 1.[16] This concession does not, however, mean that DOH committed clear error in determining that BACT is not required for lead emissions. The higher emissions of 0.22 tons per year is still below the applicable PSD significant level of 0.6 tons per year. 40 C.F.R. § 52.21(b)(23). Accordingly, the regulations do not require that BACT be used to control lead emissions, *id.* § 52.21(j)(2), or that an ambient air quality analysis be conducted with respect to lead emissions. *Id.* § 52.21(m)(1)(i)(a).

Thus, the error identified by the Petitioners in DOH's analysis does not show that DOH's conclusion was clearly erroneous, and we must reject the Petitioners' argument that additional measures must be taken to reduce lead emissions. The statute and regulations simply do not require such measures, where, as here, the potential emissions do not exceed the applicable significant level and no exceedence of air quality standards is predicted by modeling undertaken pursuant to the regulations. Accordingly, we deny review of issues relating to DOH's analysis of BACT for controlling lead emissions.

---

[15] *See* AAQ Report at 28 tbl. 1.

[16] DOH also states in its Brief that it did not miscalculate the emissions of lead when doing the analysis for compliance. DOH's Brief at 22. Petitioners have not alleged such an error; accordingly, this question is not before us.

c. *NO_x BACT—Water-to-Fuel Ratio*

DOH determined that Encogen's proposed use of selective catalytic reduction ("SCR") with water injection meets or exceeds the BACT requirements for control of NO_x emissions. AAQ Report at 12. The draft permit also contained additional conditions limiting fuel-bound nitrogen content and the water-to-fuel ratio. During the public comment period, DOH received a comment requesting that these conditions be eliminated on the grounds that there is no need for them given the technologies used and limitations required as BACT. Specifically, the comment noted that NO_X emissions are controlled and limited through the use of an SCR system and that there are permit conditions pertaining to SCR performance as well as NO_X, CO, CO_2 and O_2 concentrations. DOH's Response to Comments at 18. In its Response to Comments, DOH stated that it agreed with the comment and was eliminating these conditions, but was adding a permit condition, Special Condition C.1.e, to allow DOH to establish water-to-fuel limits at a later date. *Id.*

Mr. Hoepker requests that we grant review of DOH's decision to eliminate these permit conditions, arguing that the conditions should be reintroduced "as a safeguard against the failure of other emission control technologies." Hoepker Pet. at 12. Mr. Hoepker has not, however, offered any details that would show that DOH's Response to Comments was inadequate or that its decision to eliminate the permit conditions at issue was inconsistent with the applicable regulations. Because Mr. Hoepker had the burden of showing that elimination of this provision of the permit was clear error, review on this point is denied.

2. *Air Quality and Source Impacts Analysis*

In this part, we discuss issues raised by the Petitioners relating to another central requirement of PSD review: DOH's determination that the Station will not cause or contribute to a violation of the NAAQS or PSD increment based upon an analysis of air quality and source impacts.

a. *Background Ambient Air Data*

The regulations require an air quality assessment based upon monitoring data for any pollutants that the Station has the potential to emit in amounts greater than the applicable PSD significant levels. 40 C.F.R. § 52.21(m)(1)(i)(a). DOH determined not to require on-site monitoring data of background ambient air pollution concentrations, but instead accepted, as representative, background air data measured at the Puna

monitoring station. Mr. Hoepker seeks review of this determination, arguing that the Puna data do not "represent site-specific air quality and meteorological conditions." Hoepker Pet. at 12. Mr. Hoepker argues that "[d]ue to the agricultural and rural land use in the [area of the Station], background levels are likely to be significantly lower than those found in Puna." *Id.*

EPA guidance has recognized that representative data gathered from off-site locations and/or gathered from time periods other than the year immediately preceding the permit application may be used in lieu of on-site air monitoring. *See* Draft Manual at C.18–.19; *accord In re Hawaii Elec. Light Co.,* 8 E.A.D. at 97; *In re Kawaihae Cogeneration Project,* 7 E.A.D. at 128. The Draft Manual provides the following guidance regarding the criteria for determining whether data are "representative":

> In determining the "representativeness" of any existing data, the applicant and the permitting agency must consider the following critical items * * *:
>
> 1. monitor location;
> 2. quality of the data; and
> 3. currentness of the data.

Draft Manual at C.19. Generally, the choice of appropriate data sets for the air quality analysis is an issue largely left to the discretion of the permitting authority. *Hawaii Elec.,* 8 E.A.D. at 98 (citing *In re Hibbing Taconite Co.,* 2 E.A.D. 838, 851 (Adm'r 1989) (denying review of permitting authority's decision to use "representative" off-site data, rather than requiring pre-application, on-site monitoring)).

In questioning whether the data were collected at a "representative" location, Mr. Hoepker argues that the background air concentrations in Puna are higher than the concentrations in the area to be affected by the Station. Even assuming that Mr. Hoepker is correct, this is not a basis for review in this case. The use of background data with higher pollution concentrations, in essence, provides an additional margin of safety for future air quality at the site. *Knauf,* 8 E.A.D. at 148 n.39; *accord Kawaihae Cogeneration,* 7 E.A.D. at 112. Since the data inputs reflected higher pollution concentrations than actual background concentrations, the model's predictions are expected to show overall pollution concentrations that are greater than will actually occur when the Station is operational. It follows that, if those higher modeled concentrations do not exceed the NAAQS and PSD increments, the actual concentrations at the Station also are even less likely to exceed those standards. Accordingly, Mr. Hoepker has not

shown that DOH's Response to Comments was inadequate or its decision clearly erroneous.

Mr. Caccia and Ms. Lamme assert that "[t]hey apparently did not do their air quality background studies on days when the volcanic haze (VOG) was bad. On these days (anywhere from a couple week[s] to a couple months per year) the air quality would not be compliant with Federal ambient standards." Caccia & Lamme Pets. at 1. DOH's Response to Comments on the question of VOG stated that the ambient air quality analysis "used the most conservative (worst-case) scenario with regards to plant and atmospheric conditions, and incorporated background ambient air concentrations. The results of the analysis indicated no violations of State or Federal air quality standards." DOH's Response to Comments at 3. The Petitioners' argument does not show, based upon specific information in the record, that this response is inadequate or that the background data from Puna did not represent the same or more conservative VOG conditions.[17] Accordingly, review of these issues regarding "VOG" in the background ambient air is denied.

b. *Issues Regarding Modeling of LSFO Emissions*

Mr. Hoepker argues that DOH failed to consider adequately the emissions that will result from the use of LSFO and/or the use of no.2 fuel oil. Hoepker Pet. at 5, 9–10, 11, 12. Specifically, he contends that DOH did not consider the different emissions that may result from use of LSFO because DOH only modeled emissions of naphtha. Mr. Hoepker also contends that DOH did not consider differences between LSFO and no.2 fuel oil. DOH's Response to Comments stated that "[w]hen calculating pollutant emission rates for the ambient air analysis, the worst-case emission rate between naphtha, gasoline, and low sulfur diesel no.2 was used." DOH's Response to Comments at 6; *see also id.* at 3, 4, 7. DOH's Response to Comments also noted that the sulfur content of all of the authorized fuels is limited to 0.05% by weight. *Id.* at 7. DOH has stated further in its Brief that for the purposes of this Permit, "diesel no. 2 and

[17] In *Hawaii Electric,* we granted review and remanded the permit to DOH for further proceedings because the petitioners argued that the data used in that case to represent background ambient air quality were out of date, in part because the data were collected prior to a change in the pattern of volcanic eruption. *Hawaii Elec.,* slip op. at 42–47, 8 E.A.D. at 99–103. While the Petitioners in the present case have intimated that the Puna data do not sufficiently account for background VOG concentrations, they have offered no support for this supposition, and they have not alleged that the Puna data are out of date. Thus, we find that they have not shown any error in DOH's determination that the Puna data represent a sufficiently conservative air quality picture in this regard.

LSFO are the same" because the sulfur content is limited to 0.05% by weight regardless of the type of fuel used. DOH's Brief at 19–20.

Upon review, none of Mr. Hoepker's arguments show that DOH's responses to comments were inadequate or that its modeling analysis was clearly erroneous. Mr. Hoepker has not shown that any differences between the various fuel types would result in emissions greater than those modeled by DOH using what it determined to be "worst-case" conditions. Accordingly, review of these issues is denied.

c. *Secondary Emissions*

The Petitioners alsonnnn argue that secondary emissions and associated growth impacts have not been adequately addressed. Hoepker Pet. at 4; Caccia & Lamme Pets. at 2. DOH's Response to Comments gave specific reasons, based on the identification of certain anticipated growth industries, for its conclusion that "no significant adverse secondary impacts occur[] as a result of the project." DOH's Response to Comments at 6. The Petitioners have not shown that this response to comments is inadequate.

For PSD review, "'Secondary emissions must be specific, well-defined, quantifiable, and impact the same general area as the stationary source * * * undergoing review.'" *Knauf,* 8 E.A.D. at 166 (quoting Draft Manual at A.18); *see also* 54 Fed. Reg. 27,286, 27,289 (June 28, 1989). Here, Mr. Caccia and Ms. Lamme argue that secondary growth industries are not yet known and therefore "their emissions are not yet known." Caccia & Lamme Pets. at 2. Surely, uncertainty is inherent in any judgment as to what may occur in the future. The mere identification of that uncertainty, however, cannot, without a more meaningful accounting, serve to show clear error in DOH's determination. In somewhat greater detail, Mr. Hoepker also argues that the Encogen Station is intended to "revitalize" the area into a "combined light industrial park," which Mr. Hoepker argues will consist of industries different from those considered by DOH in its Response to Comments. Hoepker Pet. at 4–5. Mr. Hoepker does not, however, identify specific growth industries; nor does he show what the expected emissions will be from such industries. Because his arguments do not identify secondary emissions that are specific, well-defined and quantifiable, Mr. Hoepker's argument that DOH's Response to Comments are inadequate must fail.

3. *Miscellaneous*

The Petitioners have also raised a variety of issues that do not clearly fall within the Board's jurisdiction over PSD permit decisions. As we recently noted,

> The Board's jurisdiction to review PSD permits extends to those issues directly relating to permit conditions that implement the federal PSD program. In determining whether we have jurisdiction, the Board places considerable reliance on how the issue is framed in the petition for review, such as the basis upon which relief is being sought.
>
> The Board does not have authority to review every environmental concern associated with this project. Rather, the Board is charged with ensuring that [the permit issuer's] PSD permit decision comports with the applicable requirements of the federal PSD program.

Knauf, 8 E.A.D. at 161–62. In the present case, the Petitioners have raised a variety of issues over which they have not shown that the Board has jurisdiction in this PSD case.

Mr. Hoepker argues that DOH's responses to noise and water-related issues were not adequate, and that agencies such as DOH's Clean Water Branch, Safe Drinking Water Branch, and Noise and Radiation Branch should be required to give written comments on the Permit. Hoepker Pet. at 2. Hoepker also argues that Encogen should be required to comply with Title IV of the Clean Air Act with respect to controlling acid rain. Hoepker Pet. at 6. In addition, all of the Petitioners argue that DOH should have required an epidemiological study of the surrounding communities. Hoepker Pet. at 3; Caccia & Lamme Pets. at 2. The Petitioners, however, have not shown how these issues fall within the Board's PSD jurisdiction.[18] Moreover, even if these matters were to fall within our PSD jurisdiction, the Petitioners' general allegations do not

[18] In particular, DOH responded to the comments regarding noise and water-related issues by stating that such issues need to be addressed by the appropriate agency. DOH's Response to Comments at 5. DOH also responded to comments regarding acid rain by noting that the State of Hawaii is exempt from Title IV of the Clean Air Act. DOH's Response to Comments at 8. Mr. Hoepker has not shown how failure to solicit comments from other branches of DOH regarding noise and water issues violates the requirements of the federal PSD program, nor has he shown any other error in DOH's Response to Comments.

provide sufficient information or specificity from which the Board could conclude that DOH clearly erred in issuing the Permit or in establishing the conditions contained in the Permit. *See,* e.g., *In re Commonwealth Chesapeake Corp.,* 6 E.A.D. 764, 772 (EAB 1997) (denying review on the grounds that the petitions lacked sufficient information or specificity); *In re Inter-Power of New York, Inc.,* 5 E.A.D. 130, 150 (EAB 1994) (denying review of noise-related issues on grounds of lack of specificity). Accordingly, review of these issues is denied.

III. *CONCLUSION*

For the reasons set forth above, we deny Mr. Caccia's, Ms. Lamme's and Mr. Hoepker's Petitions for review of DOH's determination to issue the Permit to Encogen.

So ordered.