IN RE MASONITE CORPORATION

PSD Appeal No. 94-1

ORDER DENYING REVIEW IN PART AND REMANDING IN PART

Decided November 1, 1994

Syllabus

Citizens for a Healthy Ukiah ("CHU") seeks review of U.S. EPA Region IX's decision to issue a PSD permit to Masonite Corporation for after-the-fact approval of the modification of Masonite's "hardboard" panelling and siding manufacturing facility in Ukiah, California. The facility was modified in 1989 and 1990 to produce a new product line called the "Molded Products Line" ("MPL"), which began operating in 1990. For purposes of its BACT review, the Region divided the MPL process into two parts - the Press Line and the Grain Line - and performed a separate BACT analysis for each. CHU raises the following issues in its petition for review: (1) whether for purposes of performing a BACT analysis, the Grain Line should have been considered separately from the Press Line; (2) whether the emissions limitation representing BACT for the Press Line should be based on the 95% control efficiency for the regenerative thermal oxidizer ("RTO") assumed in the permit, even though the manufacturer at one point proposed to guarantee a higher control efficiency; (3) whether the Region adequately considered the cost-effectiveness of using the existing RTO at the facility in combination with water-borne, low solvent coatings as BACT for the Grain Line; (4) whether the Region improperly excluded parts of the MPL process from its BACT analysis; (5) whether the Region improperly failed to conduct a BACT analysis for sources at the facility other than the MPL; (6) whether the Region should have required Masonite to do a full ambient air quality analysis for VOC emissions; (7) whether the addition of the MPL and other contemporaneous changes resulted in a significant net emissions increase in PM10 emissions, necessitating a BACT analysis for that pollutant; (8) whether the Region should have considered fugitive emissions from the handling of wood chips at the facility; and (9) whether alleged deficiencies in the permit require additional modifications of the permit.

Held: The Board concludes that: (1) It was appropriate for the Region to perform separate BACT analyses for the two different parts of the MPL process, because some of the technologies available for control of emissions from one part of the process are not available for control of emissions from the other part of the process; (2) The Region did not abuse its discretion when it based the emissions limitation representing BACT for the Press Line on an assumed control efficiency that was slightly lower than the control efficiency proposed to be guaranteed by the manufacturer, because among other reasons the application of the technology to Masonite's process is unproven; and (3) The Region's rejection of the option of using the existing RTO in conjunction with water-borne coatings in its BACT analysis for Grain Line VOC emissions was based on an inadequate cost-effectiveness determination and is therefore being remanded to the Region for reconsideration. Also being remanded to the Region for reconsideration are the following issues: (1) what emissions limitation is BACT for VOC emissions from the facility's dryer ovens; (2) whether fugitive emissions of PM10

from the wood chips (if quantifiable) combined with other contemporaneous increases in PM10 emissions at the facility amount to a significant net emissions increase of PM10, thereby requiring a BACT determination for PM10 emissions; and (3) whether the permit should include a requirement for continuous automatic monitoring of the temperature of the regenerative thermal oxidizer. With respect to other issues raised in CHU's petition but not mentioned above, CHU has failed to identify any clear errors, policy matters, or exercises of discretion that warrant review. Review of those issues is therefore denied.

Before Environmental Appeals Judges Nancy B. Firestone, Ronald L. McCallum, and Edward E. Reich.

Opinion of the Board by Judge Reich:

Before us is a petition filed by Citizens for a Healthy Ukiah ("CHU"), seeking review of U.S. EPA Region IX's decision to issue a final prevention of significant deterioration ("PSD") permit and approval to construct/modify to Masonite Corporation.[1] The permit is for the modification of Masonite's "hardboard" panelling and siding manufacturing facility in Ukiah, California. The facility was modified to produce a new product line called the "Molded Products Line" ("MPL"). Masonite has already constructed the MPL addition and has been operating it since 1990.[2]

As more fully described below, CHU has raised a host of issues relating to the Region's best available control technology ("BACT") determinations for emissions of volatile organic compounds ("VOCs") from the facility, the need for full ambient air quality monitoring of VOC emissions, and the need to perform a BACT analysis for emissions of particulate matter with a diameter of less than 10 microns ("PM10").

For the reasons set out below, we are remanding the following issues for reconsideration by the Region: (1) whether using the existing regenerative thermal oxidizer at the facility in conjunction with water-borne coatings is a cost-effective control technology for controlling Grain Line VOC emissions, which should provide the basis for a more stringent BACT emissions limitation; (2) what emissions limita-

[1] The PSD program regulates air pollution in areas where air quality is cleaner than the national standards require. The PSD regulations at 40 C.F.R. § 51.21 require among other things that new major stationary sources and major modifications of such sources be carefully reviewed prior to construction to ensure that emissions from such facilities will comply with the national ambient air quality standards ("NAAQS") and applicable PSD air quality increments. The regulations also require that such facilities employ the best available control technology to minimize emissions of air pollutants. 40 C.F.R. § 52.21(j).

[2] The permit is for after-the-fact approval of such construction. As previously noted, (n.1 *supra*), PSD review normally occurs *prior* to construction. For a discussion of the circumstances leading up to Masonite's application for after-the-fact approval, see background section, *infra*.

tion is BACT for VOC emissions from the dryer ovens; (3) whether fugitive emissions of PM10 from the wood chips (if quantifiable) combined with other contemporaneous increases in PM10 emissions at the facility amount to a significant net emissions increase of PM10, thereby requiring a BACT determination for PM10 emissions; and (4) whether to include a requirement for continuous automatic monitoring of the temperature of the regenerative thermal oxidizer. With respect to the other issues raised in CHU's petition, CHU has failed to identify any clear errors, policy matters, or exercises of discretion that warrant review. Review of those issues is therefore denied.

I. *BACKGROUND*

Masonite has operated its facility in Ukiah, California since 1951. The facility previously operated two product lines: the "Presdwood Line" and the "Duolox Line." Construction of the MPL line involved physical and operational changes to the former Duolox Line. As a consequence, some of the existing emissions sources at the Duolox Line remained in operation for use at the MPL, while others were dismantled. Masonite began construction on the MPL line in 1989 and began operating the new line in 1990.

In the MPL process, wood chips are refined into pulp which is mixed with formaldehyde/phenol resin and formed into a mat and dried. The mat is then molded into the desired form in a high pressure press, coated with linseed oil and heat cured. The panels are then coated (painted) and oven dried. The finished panels are then trimmed to size. The molding, oiling, and curing steps are designated the "MPL Press Line," and the coating and drying steps are designated the "MPL Grain Line."

In early 1992, EPA and the Mendocino County Air Pollution Control District ("MCAPCD") began a formal inquiry into the operation of the MPL. A short time later, Masonite entered into a stipulated order of abatement ("SOA") with the MCAPCD, under which Masonite was allowed to continue operating the MPL, but was required to install a regenerative thermal oxidizer ("RTO") to control particulate emissions and odor from the MPL Press Line. Also as a result of this inquiry, EPA concluded that the construction of the MPL constituted a major modification of a major stationary source under the Clean Air Act and PSD regulations due to the increase in emissions of volatile organic compounds ("VOCs").

A major modification is defined as:

> [A]ny physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

40 C.F.R. § 52.21(b)(2)(i).[3] Although VOCs are not regulated under the Act, they are a precursor to the formation of ozone, which is regulated under the Act, and they are therefore treated under the PSD regulations as a proxy for ozone. Thus, the regulations provide that "[a]ny net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone." 40 C.F.R. § 52.21(b)(2)(ii). With respect to ozone, the term "significant" is defined to mean a rate of emissions that would equal or exceed 40 tons per year ("tpy")of VOCs. 40 C.F.R. § 52.21(b)(23)(i). All parties agree that the addition of the MPL increased VOC emissions by more than 40 tpy and thus constitutes a "major modification" under the PSD regulations.

A major stationary source,[4] such as the Masonite facility, may not undergo a major modification without first obtaining a PSD permit. 40 C.F.R. § 52.21(i); Section 165 of the Clean Air Act, 42 U.S.C. § 7475. Because the Region concluded that the addition of the MPL constituted a major modification of the facility, the Region issued to Masonite a notice of violation on March 27, 1992, alleging that, by constructing the MPL without first obtaining a PSD permit, Masonite had violated

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[3] A net emissions increase is defined in turn as:

> [T]he amount by which the sum of the following exceeds zero:
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> (*a*) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
>
> (*b*) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

40 C.F.R. § 52.21(b)(3)(i).

[4] A "major stationary source" is any source belonging to a list of 28 source categories that emits or has the potential to emit 100 tons per year or more of any pollutant subject to regulation under the Act, or any source not belonging to one of the 28 categories that emits or has the potential to emit such pollutants in amounts equal to or greater than 250 tons per year. 40 C.F.R. § 52.21(b)(1)(i). The Masonite facility falls within the second definition because it has the potential to emit more than 250 tons per year of one or more pollutants that are regulated under the Clean Air Act. Because Masonite was constructed prior to the enactment of the PSD requirements in Part C of the Clean Air Act, it was not required to obtain a pre-construction PSD permit when the facility was first constructed. It is, however, required to obtain a permit before it undergoes a major modification.

section 165 of the Clean Air Act, 42 U.S.C. § 7475.[5] EPA also issued an order on May 7, 1992, directing Masonite to file an application for an after-the-fact PSD permit for construction of the MPL. Masonite filed its application with the Region in September of 1992.[6]

A facility seeking a PSD permit is required to apply BACT for any pollutant regulated under the Act if the major modification would result in a significant net emissions increase of that pollutant. 40 C.F.R. § 52.21(j)(3).[7] In this case, therefore, Masonite's permit is clearly required to apply BACT for the control of VOCs (as a proxy for ozone). BACT is defined in part as follows:

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

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[5] That section provides among other things that a "major emitting facility" may not be constructed or modified unless a PSD permit has been issued. However, the PSD regulations that implement section 7475 do not use the term "major emitting facility." They use instead the terms "major stationary source" and "major modification." 40 C.F.R. § 52.21(i) (No "major stationary source" or "major modification" shall begin actual construction without a PSD permit). The definition of "major stationary source" at 40 C.F.R. § 52.21(b)(1) closely tracks the definition of "major emitting facility" at section 169 of the Clean Air Act, 42 U.S.C. § 7479(1).

[6] Masonite admits that it constructed the MPL without first obtaining a PSD permit. Despite this admission, however, Masonite has denied and continues to deny that it violated Section 165 of the Clean Air Act by adding the MPL line. Masonite's Response to Appeal and Petition for Review at 4, n.1. Masonite does not explain its basis for denying liability under section 165 in any of its pleadings, and we cannot discern what its basis might be. For our purposes, however, what matters is that Masonite does not contest that the continued operation of the MPL is subject to PSD review: Masonite admits in its permit application that the "proposed operation of the MPL as described in this application constitutes a major modification that is subject to PSD review." Masonite's Permit Application at 3-1.

[7] 40 C.F.R. § 52.21(j)(3) provides as follows:

> A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in method of operation in the unit.

> techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

40 C.F.R. §52.21(b)(12). Under the PSD regulations, the permit applicant is responsible for proposing an emissions limitation that constitutes BACT for each regulated pollutant for which there is a significant net emissions increase and for providing information on the control alternatives that can be used to achieve it. 40 C.F.R. § 52.21(n)(1)(iii). Nevertheless, regardless of the control level proposed by the applicant as BACT, the ultimate BACT decision is made by the permit-issuing authority, in this case the Region. *In re Genesee Power Station Limited Partnership*, PSD Appeal Nos. 93-1 through 93-7, at 4 (EAB, Sept. 8, 1993).

Masonite's permit application, therefore, contained a BACT analysis for VOC emissions. The Region also contracted with a consultant, Systems Applications International ("SAI"), to conduct an independent BACT review of the MPL. EPA received the final report from SAI (the "SAI Report") in July of 1992. On November 19, 1993, the Region issued a draft PSD permit to Masonite for the MPL.

For purposes of applying the BACT requirement for VOC emissions in the draft permit, the Region divided the MPL into two parts: the MPL Press Line and the MPL Grain Line (described above). To achieve BACT for VOC emissions from the MPL Press Line, the draft permit required the use of the RTO that Masonite had already installed under the stipulated order of abatement with the MCAPCD. To achieve the emissions limitation representing BACT for VOC emissions from the MPL Grain Line, the draft permit required the use of water-borne coatings with a low VOC content.

Having concluded that the addition of the MPL to the facility would not result in a significant net emissions increase of any other pollutant regulated under the Clean Air Act, the Region did not conduct a BACT analysis for any other pollutant. It nevertheless included emissions limitations in the draft permit for particulate matter with a diameter of less than 10 microns (PM10), nitrogen oxides (NOx), carbon monoxide, and opacity at a number of emissions units in the MPL.

The original comment period on the draft permit was extended to January 28, 1994, and a public hearing was held on the draft permit on January 27, 1994. CHU submitted comments in a timely fashion and participated at the public hearing, challenging many aspects of the draft permit. The Region mailed notice of the final permit, which is the subject of this appeal, to CHU on May 18, 1994. The final permit contained

essentially the same emissions limitations that were included in the draft permit. On June 20, 1994, CHU submitted a timely petition for review.

CHU raises the following issues in its petition for review: (1) whether for purposes of performing a BACT analysis, one part of the MPL process (the Press Line) can be considered separately from another part of the MPL process (the Grain Line); (2) whether the emissions limitation representing BACT for the Press Line should be based on a 98% control efficiency of the RTO, rather than the 95% control efficiency assumed in the permit; (3) whether the Region adequately considered using the existing RTO in combination with water-borne, low solvent coatings as BACT for the Grain Line; (4) whether the Region improperly excluded parts of the MPL process from its BACT analysis; (5) whether the Region improperly failed to conduct a BACT analysis for sources at the facility other than the MPL; (6) whether the Region should have required Masonite to do a full ambient air quality analysis for VOC emissions; (7) whether the addition of the MPL and other contemporaneous changes resulted in a significant net emissions increase in PM10 emissions, necessitating a BACT analysis for that pollutant; (8) whether the Region should have considered fugitive emissions from the handling of wood chips at the facility; and (9) whether deficiencies in the permit require additional modifications of the permit.

II. *DISCUSSION*

Under the rules that govern this proceeding, a PSD permit ordinarily will not be reviewed unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. *See* 40 C.F.R. §124.19; 45 Fed. Reg. 33,412 (May 19, 1980). The preamble to the promulgation of these rules states that "this power of review should be only sparingly exercised," and that "most permit conditions should be finally determined at the Regional [or State] level." *Id.* The burden of demonstrating that review is warranted is on the petitioner. *In re Essex County (N.J.) Resource Recovery Facility*, PSD Appeal No. 93-10, at 6-7 (EAB, Apr. 18, 1994); *In re Inter-Power of New York, Inc.*, PSD Appeal Nos. 92-8 and 92-9, at 17 (EAB, Mar. 16, 1994).

A. *The Region's BACT Analysis for the MPL*

1. *Separating the Press Line from the Grain Line*

In its petition, CHU challenges the Region's decision to perform separate BACT analyses for the Grain Line and the Press Line. CHU argues that the Region should perform only one BACT analysis for the

two lines as a single entity. The Region responds that the two processes are fundamentally different and cites Masonite's permit application, in which Masonite represents that the "nature of the VOC emissions" from the two processes is different. Specifically, Masonite points out that VOCs from the Press line are mixed with particulate matter whereas VOCs from the Grain line are not. Masonite's Permit Application at 4-1. This means that control technologies that would be appropriate for one might not be appropriate for the other. *Id.* This conclusion is supported by the SAI Report, which notes that:

> The composite vent stream from the MPL press, oil applicator, and kiln presents a number of difficulties in identifying candidate controls. This emission stream contains not only volatile organic chemicals (VOCs) but it is [sic] also contains particulate matter (PM) in the form of wood dust. The pollutant mixture of particulate and volatile species eliminates a number of control techniques from consideration.

SAI Report at 3-2. The SAI Report also states that:

> The composite vent stream developed for the MPL grain line is less complicated for control considerations than the MPL press, oil applicator, and kiln emission stream. As shown on Table 2-3, the MPL grain line vent stream contains only VOC species. Particulate pollutants are not present in this part of the Masonite process.

SAI Report at 3-12 through 3-13.

In a BACT determination, the Region must give consideration to each individual emissions unit or pollutant emitting activity subject to review. New Source Review Workshop Manual at B.4.[8] We agree with the Region that the Grain Line and the Press Line are properly treated as separate pollutant-emitting activities. As noted above, the Press Line emits PM10, but the Grain Line does not, and this difference means that some technologies available for controlling emissions from the Grain Line will not be available for controlling emissions from the

[8] The New Source Review Workshop Manual is a draft document issued by EPA's Air Quality Management Division in October 1990. It was developed for use in conjunction with new source review workshops and training, and to guide permitting officials. Although it is not accorded the same weight as a binding Agency regulation, it has been looked to by this Board as the most current statement of the Agency's thinking on BACT issues. *See, e.g., In re Inter-Power of New York, Inc.*, PSD Appeal Nos. 92-8 and 92-9, at 6 n.8 (EAB, Mar. 16, 1994); *In re Hawaiian Commercial & Sugar Company*, PSD Appeal No. 92-1, at 6 (EAB, July 20, 1992).

Press Line. Moreover, even though both lines emit VOCs, the technologies for controlling VOC emissions from the Grain Line are not necessarily available for controlling VOC emissions from the Press Line. Because the two lines are separate pollutant emitting activities for which the available control technologies are different, the Region's decision to perform separate BACT analyses for the two lines does not strike us as clearly erroneous. We conclude that CHU has not met its burden of identifying a clear error, policy consideration or exercise of discretion that warrants review. Accordingly, we are denying review of this issue.

2. *BACT for the Press Line*

The emissions limitations for VOC emissions from the Press Line assume that the RTO will achieve a control efficiency of 95%. CHU argues that the vendor of the RTO, Smith Engineering Company, "expressly warrants 'a minimum of 97% VOC destruction efficiency.'" SAI Report at C-3. CHU also points out that a proposal request from Smith Engineering Company lists both the design destruction efficiency and the guaranteed destruction efficiency as 98%. SAI Report at C-17. CHU contends, therefore, that the emissions limitation for VOC emissions from the Press Line should be made more stringent to reflect the 98% removal efficiency that CHU asserts the RTO is capable of achieving. CHU argues that by basing its emissions limitations for VOC emissions from the Press Line on a 95% control efficiency rather than the 98% control efficiency guaranteed by the vendor, the Region has failed to start its BACT analysis with consideration of the most stringent available technology, as it is required to do under the "top down" statutory requirement. Appeal and Petition for Review at 9.

The Region responds that this issue was never raised during the comment period and may not be raised now.[9] We disagree. On December 8, 1993, legal and technical staff from the Region met with members of CHU. A memorandum summarizing the meeting prepared by Jennifer Fox of the Region notes that:

> CHU asked for EPA to require a higher destruction efficiency from the RTO, and stated that EPA's own BACT standard is for a 99.9% destruction efficiency and that a 95% destruction does not satisfy the BACT standard.

[9] *See* 40 C.F.R. §§ 124.13 & 124.19(a) (an issue that is reasonably ascertainable during the comment period must be raised at that time by someone (not necessarily the petitioner) if it is to be preserved for review); *In re Patowmack Power Partners, L.P.*, PSD Appeal Nos. 93-13, 93-14, at 3 (EAB, Feb. 24, 1994) (same); *In re Ogden Martin Systems of Onondaga, Inc. and Onondaga County Resource Recovery Facility*, PSD Appeal No. 92-7, at 3, n.4 (EAB, Dec. 1, 1992)(same).

Summary of Meeting with CHU on December 8, 1993, Exhibit A, Petitioner's Reply Brief in Support of Appeal and Petition for Review.[10] By raising the issue at the above-referenced meeting with Regional staff during the comment period, CHU satisfied the requirements for preserving the issue on appeal. Thus, the issue must be addressed on its merits.

When the Region prescribes an emissions limitation representing BACT, the limitation does not necessarily reflect the highest possible control efficiency achievable by the technology on which the emissions limitation is based. Rather, the Region has discretion to base the emissions limitation on a control efficiency that is somewhat lower than the optimal level. *See In re Pennsauken County, New Jersey Resource Recovery Facility*, PSD Appeal No. 88-8, at 5 (Adm'r, Apr. 20, 1989) (Order Denying Review) (Region not clearly erroneous in basing BACT on assumed control efficiency lower than optimal control efficiency achievable by the selected technology, where there was little experience with application of technology to that type of facility, control efficiency was known to fluctuate, and permit required tests to be performed to determine optimum operating conditions for technology). There are several different reasons why a permitting authority might choose to do this. One reason is that the control efficiency achievable through the use of the technology may fluctuate, so that it would not always achieve its optimal control efficiency. In that case, setting the emissions limitation to reflect the highest control efficiency would make violations of the permit unavoidable. Another possible reason is that the technology itself, or its application to the type of facility in question, may be relatively unproven. *See* New Source Review Workshop Manual at B.24 ("[T]he consideration of a lower level of control for a given technology may be warranted in cases where past decisions involved different source types."). To account for these possibilities, a permitting authority must be allowed a certain degree

[10] CHU's comments, as summarized in Ms. Fox's memorandum, are clearly part of the administrative record for Masonite's permit. *See* Certified Index of Administrative Record at 5 (listing Ms. Fox's memorandum). The administrative record for a final permit includes "[a]ll comments received during the public comment period provided under § 124.10 (including any extension or reopening under § 124.14)[.]" 40 C.F.R. § 124.18(b)(1). It also contains "[o]ther documents contained in the supporting file for the permit[.]" 40 C.F.R. § 124.18(b)(6). Ms. Fox's memorandum, and the comments summarized therein, would certainly fall within the latter category, and arguably the comments summarized therein would fall within the former category. We note, however, that but for Ms. Fox's memorandum, we would not recognize CHU's oral comments as part of the administrative record. If a comment is submitted orally to the Region at a meeting that is not being taped or transcribed, it must still be summarized in writing and submitted to the Region before it becomes part of the administrative record, unless the Region itself documents the comment for the record, as it did here. *Cf.* 40 C.F.R. § 24.18(b)(2)(it is the "tape or transcript" of oral comments made at a public hearing that becomes part of the administrative record, not the oral comments themselves).

of discretion to set the emissions limitation at a level that does not necessarily reflect the highest possible control efficiency, but will allow the permittee to achieve compliance consistently.

In this case, the Region knew about the vendor's proposed guarantee, but nevertheless based the emissions limitation on an assumed 95% removal efficiency. In support of this decision, the Region notes that the vendor only proposed to guarantee a 97% efficiency, not a 98% efficiency. SAI Report at C-3. The Region observes that the difference between a 97% and a 95% efficiency rate translates to a difference of about 2-3 tpy additional VOC reduction, an impact that the Region characterizes as "marginal." The Region also observes that "the RTO was a relatively new technology for this type of process and thus some discretion in control efficiency was warranted." Region's Response to Appeal and Petition for Review at 16. The Region states that it reviewed the BACT/LAER Clearinghouse data to determine the range of control efficiencies required for similar incineration techniques. It determined that the range of efficiencies was 76% to 85%, although it did come across one instance in which the Clearinghouse noted that the expected efficiency of the technology was 95%. On the basis of this information, the Region concludes that even at a 95% control efficiency, "the RTO still ranks among the top of the list of control technologies for control efficiency." *Id.* at 16-17. Finally, the Region cites the need for the RTO to operate under a wide variety of operating conditions.

In view of the Region's explanation, set forth above, we conclude that the Region's decision to base the emissions limitation on an assumed control efficiency of 95% was not an abuse of discretion, despite the vendor's proposed guarantee of a 97% removal efficiency. We are particularly persuaded by the Region's assertion that, while the RTO has been successfully applied to control VOC emissions in other industries, its application to the particular process under consideration is apparently unproven. *See* SAI Report at 3-2 (EPA BACT/LAER Clearinghouse had no data applicable to the MPL Press Line, oil applicator, or kiln).[11]

[11] CHU speculates that the Region's decision is really based on a simple misreading of the raw data by SAI. SAI's conclusions about the RTO were based on information supplied to it by Bartlett Controls, Inc. In that information, Bartlett lists the "destruction efficiency" as 98%, while the "oxidizer thermal efficiency" is listed as 95%. CHU believes that SAI confused the two, assuming that the destruction efficiency was 95% and that the Region in turn relied on SAI's mistake. We are unpersuaded by CHU's speculation. Before we assume that a sophisticated pollution control consultant like SAI confused "oxidizer thermal efficiency" with "destruction efficiency," we would need to see more evidence than that offered by CHU. There is even less support for assuming the Region made a

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Contrary to CHU's implicit assumption, a vendor guarantee is not in itself sufficient justification that a technology will work.[12] Further, it is unclear whether the vendor, once it had a full understanding of the details of installation and operation, was willing to stand by its proposed 97% guarantee.[13] Finally, we note that the permit prescribes good air pollution control practices requiring Masonite to operate and maintain the RTO at peak efficiency to the extent practicable. Thus, if Masonite engages in good pollution control practices and the RTO is truly capable of consistently achieving a 98% control efficiency, then that is the control efficiency it will be required to achieve, regardless of the fact that the emissions limitations in the permit does not contemplate such efficiency.

Under the circumstances, we do not believe that CHU has met its burden of demonstrating that the Region has abused its discretion in basing the permit's emissions limitation on a control effi-

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similar mistake: Even as it prescribed emissions limitations based on a 95% control efficiency, the Region evidenced its awareness that the "predicted" control efficiency of the RTO was 98%. EPA's Air Quality Impact Report, Attachment C, Region's Response to Appeal and Petition for Review at 7. Moreover, the Region was not relying solely on information provided to it by SAI. It also had before it Masonite's permit application, in which the control efficiency of the RTO is listed as a range of values from 90% to 98% (Masonite's Permit Application, Tables 4-4 and 4-5) and in which Masonite recommends a 95% control efficiency. Masonite's Permit Application at 4-22. Accordingly, we reject CHU's speculation that the 95% figure adopted by the Region is all the result of SAI's misreading of the raw data.

[12] On the subject of vendor guarantees, EPA's New Source Review Workshop Manual at B-20 states:

> Vendor guarantees may provide an indication of commercial availability and the technical feasibility of a control technique and could contribute to a determination of technical feasibility or technical infeasibility, depending on circumstances. However, EPA does not consider a vendor guarantee alone to be sufficient justification that a control option will work. Conversely, lack of a vendor guarantee by itself does not present sufficient justification that a control option or emissions limit is technically infeasible. Generally, decisions about technical feasibility will be based on chemical and engineering analyses (as discussed above) in conjunction with information about vendor guarantees.

[13] In its response to the appeal, Masonite states that the vendor's proposal and contract (including representations and warranties) actually developed for the MPL Press Line demonstrate that the minimum control efficiency that the vendor was willing to guarantee was 95%, not 97%. Masonite Corporation's Response to Appeal and Petition for Review at 16. These documents, however, are not part of the record that was before the Region, and as CHU points out in its reply brief, the 95% guarantee may reflect nothing more than the vendor's recognition that its customer, Masonite, was seeking an emissions limitation based on an assumed 95% control efficiency. Petitioner's Reply Brief at 13, n.10. Thus, while we reject Masonite's argument that the final guarantee *supports* the 95% figure, this does illustrate the difficulty of relying exclusively on a proposed vendor guarantee.

ciency that may be somewhat lower than the optimal efficiency achievable by the selected technology. Accordingly, we are denying review of this issue.[14]

3. *BACT for the Grain Line*

The emissions limitations in the permit for VOC emissions from the Grain Line are based solely on the use of water-borne coatings, which have a low VOC content. CHU argues that BACT for the Grain Line should be based on a combination of water-borne coatings and use of the Press Line's RTO. With the use of water-borne coatings alone, the Grain Line will emit approximately 132 tons per year of VOCs. Masonite's Permit Application, Table 4-7. Adding the RTO would further reduce emissions by approximately 125 tons per year. *Id.*[15]

In its permit application, Masonite concluded that using an RTO in combination with water-borne coatings would be the most stringent, technically feasible control option for Grain Line VOC emissions. Masonite's Permit Application at 4-22. However, Masonite rejected this option on cost-effectiveness grounds. Masonite calculated the cost of building and using a new RTO for the Grain Line at $4,522 per ton per year. Masonite noted that "[a] typical cost-effectiveness range used by USEPA Office of Air Quality Planning and Standards to define BACT relative to NSPS development is between $2,000 to $2,500 per ton of pollutants removed." Masonite concluded, therefore, that "the level of cost associated with RTO control on the coating line would be excessive and not indicative of BACT for the control of VOC emissions." Masonite's Permit Application at 4-29.

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[14] CHU also contends that the RTO will need to operate at a higher level of air flow than its "typical" air flow to handle the VOCs being ducted to it from the Press Line. Appeal and Petition for Review at 16. CHU believes that:

> [T]he PSD permit should be remanded for further information regarding the RTO operation at maximum capacity, specifically whether the required VOC reduction and emission rate can be sustained, and whether additional controls or safeguards should be required in case constant operation at maximum capacity increases the likelihood of equipment failure.

Id. CHU cites its testimony given at the public hearing to the effect that "the RTO's a real sensitive device and it has exploded twice." Reporter's Transcript of Public Hearing at 41. Masonite characterizes this statement as false and asserts that, to its knowledge, "the RTO has never exploded." Masonite's Response to Appeal and Petition for Review at 32. Masonite also states (and CHU has provided no data to the contrary) that the RTO *is* operating at maximum capacity on a routine basis. *Id.* at 31. We do not believe CHU has sustained its burden of showing a basis for granting review of this issue.

[15] To put this potential further reduction in perspective, we note that 125 tons per year of VOCs is roughly three times the significance level for VOCs (as a proxy for ozone) under the PSD regulations. 40 C.F.R. § 52.21(b)(23)(i).

In examining RTO as a control option, however, Masonite assumed without explanation that an entirely new RTO would have to be built for the Grain Line. It apparently ignored the fact that an RTO had already been built at the facility to control odor and dust and was going to be used to control VOC emissions from the Press Line. Masonite, therefore, did not consider the cost-effectiveness of ducting VOC emissions from the Grain Line to the existing RTO. The Region's contractor, SAI, however, did consider this possibility, and concluded that doing so, at a cost of $335,000, would be cost-effective. It therefore concluded that BACT should be based on the combination of using the existing RTO in combination with water-borne coatings. The Region, however, concluded that the SAI analysis was based on erroneous data, and rejected the combination as not being cost-effective.

In determining whether BACT for a pollutant should be based on a particular control technology, the permit issuer must consider the economic impacts of using the control technology. *See* 40 C.F.R. § 52.21(b)(12) (BACT definition). The determination of economic impacts focuses on whether the control option under consideration would be cost-effective, measured in terms of "the dollars per tons of pollutant emissions reduced." New Source Review Workshop Manual at B.31. The "average cost-effectiveness" of a particular technology is calculated by dividing the average annualized cost of installing and operating the control technology by the tons per year of pollutant that the technology would remove. *Id.* at B.37. This cost-effectiveness figure is then compared with what other companies in the same industry have been required to pay in recent BACT determinations to remove a ton of the same pollutant. In most cases, a control option is determined to be economically achievable if its cost-effectiveness is within the range of costs being borne by other sources of the same type to control the pollutant. *Inter-Power*, *supra*, at 7; New Source Review Workshop Manual at 44. "In the absence of unusual circumstances, the presumption is that sources within the same source category are similar in nature, and that [they can bear the same] costs and other impacts." *Id.* at B.29.[16]

The Region's conclusion that using the existing RTO to control Grain Line VOC emissions would not be cost-effective was based on three considerations. First, it discovered that SAI had underestimated the amount of VOCs that would need to be ducted to the RTO from the Grain Line and therefore underestimated the full cost of retrofitting the RTO for that purpose. The Region concluded that expanding the capacity of the exist-

[16] In addition to calculating the average cost-effectiveness, the permit issuing authority should also calculate what is referred to as the "incremental cost-effectiveness" of the technology under consideration. *See* New Source Review Workshop Manual at B.41.

ing RTO so that it could handle VOC emissions from the Grain Line would require a capital investment of at least $400,000 that had not been included in SAI's calculations.[17] Based on these extra costs, the Region assumed that using the existing RTO would not be cost-effective.[18] Second, the Region noted that similarly situated facilities have not been required to use an RTO in recent BACT determinations. Finally, it noted that with water-borne coatings alone, the Grain Line would achieve the same emissions rate that other facilities, using higher VOC content coatings, achieve with add-on incineration control technology. The Region concluded, therefore, that using the existing RTO for Grain Line VOC emissions would not be cost-effective and therefore would not be economically achievable.

CHU argues that the Region does not adequately explain how it determined that using the existing RTO would not be cost-effective. CHU contends that the Region "failed to carry out an appropriate cost-effectiveness evaluation for this permit." Appeal and Petition for Review at 14. CHU argues, therefore, that the Region's rejection of the existing RTO on cost-effectiveness grounds was clearly erroneous. For the following reasons, we agree with CHU.

The Region itself admits that it "did not do a final cost-effectiveness analysis in determining BACT for the Grain Line." Region's Response to

[17] The Region concluded that to handle the additional tons of VOCs from the Grain Line, the existing RTO would need to be retrofitted with another canister, at a cost of $200,000, a cost not considered by SAI. In addition, the Region asserts that retrofitting the RTO would also involve unspecified "significant costs" to increase the flow capacity of the RTO, which costs were not considered by SAI. Masonite estimates that these "significant" additional costs would be at least another $200,000. Thus, retrofitting the RTO to handle VOC emissions from the Grain Line would involve a capital investment of at least $400,000 more than the figure used by SAI in its calculations.

[18] In its petition, CHU also argues that:

> EPA Region IX's BACT analysis, which considers the economic impact of *retrofitting* the existing RTO to accommodate the grain line, is totally inappropriate. Masonite's application should be evaluated as if Masonite was newly installing the MPL, as a law abiding applicant would have done, and had not yet installed its existing RTO. Otherwise, Masonite will benefit from having hidden the modifications from EPA.

(Emphasis in the original.) We certainly understand CHU's argument that the permittee should not profit by its failure to timely apply for a permit. However, that issue would come into play only if the retrofitting costs exceeded those of building a new RTO. Here, the available evidence in the record indicates that retrofitting the RTO would be far *less expensive* than building a new one. Masonite's BACT analysis estimates that building a new RTO for the Grain Line would cost $1,234,870. Permit Application at 4-25. SAI's BACT analysis, on the other hand, estimates that the cost of retrofitting the RTO would be $335,000. SAI Report at J-2. Even if SAI underestimated these costs by $400,000, as the Region and Masonite claim, the cost of retrofitting is still substantially less than the cost of building a new RTO. Therefore, we do not see how using retrofitting costs can be seen as benefitting Masonite.

Appeal and Petition for Review at 18. Before a control option may be rejected on cost-effectiveness grounds, the Region must have a reasonably accurate idea of what the cost-effectiveness of the control option is. This does not always mean that the Region is required to perform a detailed cost-effectiveness analysis. *See* New Source Review Workshop Manual at B.35 ("Normally the submittal [by the applicant] of very detailed and comprehensive project cost data is not necessary."). This is because the cost of employing a particular technology may be so obviously excessive in relation to the removal efficiency of the technology that the Region need not perform a detailed, comprehensive calculation of cost effectiveness to determine that the technology should be rejected.

This is clearly not one of those cases. Here, it is by no means obvious from the information that the Region itself relies on that the cost of using the existing RTO would be excessive in relation to the tons per year of VOCs removed. In this regard, we note that SAI's cost-effectiveness figure ($1600 per ton per year) for the control technology was well below the upper limits of costs ($2000 to $2500) that Masonite itself uses as a yardstick for cost-effectiveness determinations in its permit application. Masonite's Permit Application at 4-29. Even if SAI underestimated the capital investment required to retrofit the RTO by $400,000, as the Region and Masonite believe, it must be remembered that SAI also underestimated the tons per year of VOCs that would be removed by the RTO. We note, moreover, that the increase in the capital recovery cost (the annualized cost of the capital investment)[19] attributable to SAI's alleged error and the increase in tons per year removed attributable to SAI's alleged error are roughly proportional and tend to offset each other.[20] It is thus unclear whether the final cost-effectiveness calculation will be higher, lower, or roughly equal to the calculation performed by SAI (and found to be within the acceptable range). Under these circumstances, the Region's rejection of the RTO on cost-effectiveness grounds without doing a full cost-effectiveness analysis was too hasty. We agree with CHU, therefore, that the Region's BACT determination for VOC emissions from the Grain Line was clearly erroneous because it was based on an incomplete cost-effectiveness analysis.

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[19] In the calculations performed by both Masonite and SAI, only 16% of the capital investment is reflected in the cost-effectiveness figure. This is because cost-effectiveness is calculated on an annual basis and the cost of the capital investment is spread out over many years. *See* New Source Review Workshop Manual, Appendix B, at b.10 (formula for annualizing capital investment).

[20] Correcting for SAI's alleged errors with the figures supplied by the Region and Masonite, we calculate that the capital recovery cost would increase by a little over 100% from $54,600 a year to $119,805, while the tons per year removed would increase by a little less than 100% from 64 tons per year to 125 tons per year.

The Region also based its *cost-effectiveness determination* on several recent BACT determinations for other facilities that the Region believes are comparable to the facility under consideration.[21, 22] In two of those determinations, involving other Masonite facilities using a coating process similar to that used at the MPL, the emissions limitation representing BACT was based on the use of water-borne coatings alone with no add-on controls. The Region concluded that BACT in this case should not be based on an RTO, because these similar facilities were not required to install RTOs.

This analysis was defective. Since the comparison was being made to determine cost-effectiveness, rather than technological feasibility, it needed to consider what cost-effective options might be available at each facility. In that sense, the other facilities are not truly comparable to the Ukiah facility because they did not have existing RTOs at the site that could be used for incineration of VOCs. While the cost of requiring construction of a new RTO may have been deemed too costly in those other cases, the comparatively lower cost of retrofitting an existing RTO[23] was not an alternative and could not have been considered in those other cases. The Region is not required to ignore the existing RTO at Masonite's facility simply because otherwise similar facilities do not have one. In this respect, Masonite is not similarly situated to these other facilities.[24] The Region and Masonite appear to have accepted this idea in the context of the Press Line: BACT for the

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[21] It is clear that the BACT determinations cited by the Region are meant only to support the Region's cost-effectiveness determination. The BACT determinations have not been cited as bearing on the issue of whether the RTO is "available" in the sense of being technically feasible for the facility under consideration. In its permit application, Masonite concluded that an RTO was a technically feasible control option for control of VOC emissions from the Grain Line, and the Region has proceeded on that assumption. This distinguishes the analysis from cases where the technical feasibility of a control option is at issue, such a *In re Old Dominion Electric Cooperative*, PSD Appeal No. 91-39, at 26-29 (Adm'r, Jan. 29, 1992).

[22] We reject CHU's argument that comparisons to other facilities are irrelevant. However, we believe it is important to address the errors made by the Region in its reliance on these BACT determinations even if those errors were not raised with specificity by CHU, because they are an inseparable part of the cost-effectiveness issue that is being remanded to the Region today.

[23] *See supra*, n.17 (comparing cost of building new RTO to cost of retrofitting existing RTO).

[24] The fact that no other facilities of the type under consideration have been required to employ a particular technology might in appropriate circumstances support a finding that the technology is not "available" because its technical feasibility had not yet been adequately demonstrated. *See, e.g., In re Old Dominion Electric Cooperative, Clover, Virginia*, PSD Appeal No. 91-39, at 26-29 (Adm'r, Jan. 29, 1992) (finding no clear error in State's rejection of selective catalytic reduction for facility under consideration because technical feasibility of that technology had not been demonstrated at any domestic facilities of the type under consideration). As noted above, however, the issue of whether the RTO is technically feasible has not arisen in this case; the comparisons are being made solely to support a *cost-effectiveness* determination.

Press Line is based on the use of the existing RTO, even though it is not BACT for other facilities, according to Masonite. The key consideration is cost. If retrofitting the existing RTO is cost-effective compared to the cost that similar sources within the surface coating industry typically have to pay to control VOC emissions, then retrofitting could be BACT for Masonite, even though it is not BACT for other facilities where the cost of control would be greater. *See Inter-Power*, *supra*, at 23 ("[C]ost-effectiveness is determined in most cases by showing that a control option or combination of options is either within or outside the range of costs being borne by similar sources under recent BACT determinations.").

The Region also cites several BACT determinations involving coating processes similar to that used by Masonite except that the coatings had a high VOC content. In those cases, BACT for VOCs was based on the use of incinerators. The Region points out that Masonite achieves the same emissions rate using water-borne coatings as these facilities achieve using high VOC coatings and incineration. Because Masonite is achieving the same emissions rate as these other facilities, the Region believes that BACT for VOC emissions from the Grain Line should be based on water-borne coatings alone, without resort to add-on technologies. We disagree that these comparisons are dispositive. BACT may require the use of add-on controls even though Masonite achieves the same emissions rate using water-borne coatings as other facilities have achieved using costly incineration of high VOC coatings. Again, the key consideration is cost. If a combination of using water-borne coatings with the existing RTO would be cost-effective as compared to what the surface coating industry in general typically pays to remove a ton of VOCs from its emissions, then BACT for VOC emissions in this case might very well be based on such a combination. *Id.*; *see also* New Source Review Workshop Manual at B-14 ("Combinations of inherently lower-polluting processes/practices (or a process made to be inherently less polluting) and add-on controls are likely to yield more effective means of emissions control than either approach alone. Therefore, the option to utilize an inherently lower-polluting process does not, in an of itself, mean that no additional add-on controls need be included in the BACT analysis.").[25]

For all the foregoing reasons, we agree with CHU that the Region's decision to reject the existing RTO on cost-effectiveness grounds was clearly erroneous because the Region's cost-effectiveness analysis was

[25] We do not reach, and take no position on, the issue of whether an RTO would be BACT for a similar facility that has not yet been constructed or has been constructed but does not have an existing RTO.

incomplete.[26] We are therefore remanding this issue to the Region for reconsideration. On remand, the Region is directed to perform a complete analysis of the cost-effectiveness of ducting VOC emissions from the Grain Line to the existing RTO in combination with using water-borne coatings to determine whether this combination constitutes BACT for the Grain Line.[27]

The Control Efficiency of Water-Borne Coatings: The emissions limitations for VOC emissions from the Grain Line are based on the Region's assumption that the water-borne coatings used by Masonite have a control efficiency of 80%. In its permit application, Masonite states that EPA has determined that water-borne coatings in general achieve VOC emissions reductions in the range of 80% to 90%. Masonite's Permit Application at 4-14. Based on this statement in Masonite's permit application, CHU challenges the Region's assumption that the control efficiency of Masonite's water-borne coatings is only 80%. CHU argues that the Region "failed to examine the feasibility of a greater reduction in VOC emissions ('80 to *90* percent') which Masonite claims that USEPA has determined to be achievable using water borne coatings." Appeal and Petition for Review at 12.

CHU's argument is rejected. The record clearly demonstrates that the Region did consider the feasibility of using other water-borne coatings. In EPA's Ambient Air Quality Impact Report at 8, the Region states that:

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[26] Both the Region and Masonite quote language from the Board's *Inter-Power* decision for the proposition that the Board will accord deference to a Region's decision to reject a particular technology if it appears that the Region considered the technology before rejecting it. Specifically, that decision held that:

> [I]t is important to distinguish between BACT decisions where the permit issuer failed to consider an "available" control option in the first instance and decisions where the option was considered but rejected. Where a more stringent alternative is not evaluated because the permitting authority erred in not identifying it as an "available" option, a remand is usually appropriate, because proper BACT analysis requires consideration of all potentially "available" control technologies. However, where an alternative control option has been evaluated and rejected, those favoring the option must show that the evidence "for" the control option *clearly outweighs* the evidence "against" its application.

Inter-Power, *supra*, at 17-18 (emphasis in original) (footnotes and citations omitted). In this case, the cited language does not support the deference sought by the Region and Masonite, for the Region's review of the existing RTO as a control option for the Grain Line was never properly completed.

[27] In calculating the cost-effectiveness of using the existing RTO on remand, the Region should use the emissions rate achievable with water-borne coatings as the baseline or uncontrolled emissions rate. *See* New Source Review Workshop Manual at B.37 ("When calculating the cost effectiveness of adding post process emissions control to certain inherently lower polluting processes, baseline

Continued

> Although there are no NSPS emission standards for hardboard operations, the applicant compared the VOC content of the Masonite coatings to those in other surface coating standards (NSPS, Subpart WW, EE, MM, SS, TT, TTT). The VOC content of the (water-borne) coatings used by Masonite are below those published in the other surface coating NSPS emission standards.

Thus, it is clear that the Region did consider the use of other water-borne coatings in its BACT analysis.

The fact that Masonite in its permit application noted that water-borne coatings in general can achieve a range of reductions from "80 to 90 percent" does not cast doubt on the Region's conclusion. In the same passage containing the "80 to 90 percent" language, Masonite also observes that:

> The actual reduction, however, will depend upon several variables: the composition of the original organic solvent-borne coating, the composition of the water-borne coating replacement, relative transfer efficiencies, and the relative film thicknesses required.

Masonite's Permit Application at 4-14. Thus, read in context, the "80 to 90 percent" language quoted by CHU does not mean that the water-

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emissions may be assumed to be the emissions from the lower polluting process itself. In other words, emission reduction credit can be taken for use of inherently lower polluting processes."). If, on the basis of these calculations, using the existing RTO does not appear to be cost-effective, however, it may nevertheless be appropriate to calculate the total cost-effectiveness of the combination of using the existing RTO and water-borne coatings, treating the combination as a single control option and using as a baseline the emissions rate obtainable without the use of water-borne coatings (*i.e.*, using VOC laden coatings). Because using water-borne coatings is apparently cost-free, the total cost of using the combination of the existing RTO and water-borne coatings (divided by the tons per year removed) may turn out to be cost-effective when compared to what other companies in the surface coating industry pay to achieve BACT for VOC emissions. This approach was endorsed in our recent *Inter-Power* decision:

> [W]here a technological advance [in this case the use of water-borne coatings] significantly reduces the cost of control, requiring the use of a cleaner fuel or additional controls may add substantial incremental costs but may still be cost effective. It may be cost-effective because the total costs or combined costs are, on average cost per ton of pollutant reduced, still within the range of total costs being borne by others in achieving BACT. As the *Draft Manual* recognizes, cost-effectiveness must ultimately be judged by whether "total cost-effectiveness is within the normal range of acceptable BACT costs." *Draft Manual* at B-46.

Inter-Power, *supra*, at 24, n.33.

borne coatings used by Masonite are necessarily capable of achieving reductions of more than 80%. We conclude, therefore, that CHU has failed to identify a clear error, important policy consideration, or exercise of discretion that warrants review. Review of this issue is therefore denied.

4. *Parts of the MPL Process Excluded from the BACT Analysis*

CHU charges that, in addition to the Grain Line and the Press Line, other parts of the MPL emit VOCs and that the Region's BACT analysis omitted these other parts. Specifically, CHU contends that the Region failed to consider VOC emissions from: (1) the pulp mixing and forming process; (2) the drying ovens; and (3) VOCs from the Press Line other than those arising from the linseed oil.

The Region responds that the pulp mixing process uses only steam and does not emit VOCs. It also states that, although the forming process probably involves minor emissions of VOCs, the modification of the facility did not result in an increase in such emissions.[28] CHU has not provided any basis for us to question the accuracy of the Region's representations on this matter. *See Inter-Power, supra*, at 26-27 (alleging clear error not sufficient basis for review where petitioner "has not provided the Board with any reason for questioning the Region's conclusion."). *In re Hadson Power 14 - Buena Vista*, PSD Appeal Nos. 92-3, 92-4, 92-5, at 42, n.54 (EAB, Oct. 5, 1992) (mere allegation of clear error does not satisfy burden under § 124.19 of providing a "statement of reasons" showing that the permit is based on clear error). Accordingly review of this part of CHU's petition is denied.

CHU's challenge concerning the drying ovens, however, appears to have some merit. The Region itself admits that it was mistaken in its response to comments when it stated that there were no emissions increases from the drying ovens. In reality, the Region now believes

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[28] *See* 40 C.F.R. § 52.21(j)(3):

> A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit *at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.*

(Emphasis added.) Emissions unit is defined as "any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Act." 40 C.F.R. § 52.21(b)(7).

that there has been a net emissions increase of 1 tpy, which would subject those units to PSD review. The Region notes that, due to the increased emissions at the units, it included emissions limits for these units in the PSD permit. It notes somewhat ambiguously, however, that it did not state that such limits were BACT for the Coe and Moore dryers. It contends, however, that the emissions limitation included in the permit for these emissions are adequate.

The Region's statement appears to be an admission that it did not do a formal BACT analysis for the VOC emissions from the drying ovens. (No such analysis appears in the administrative record.) If we are reading the Region's statement correctly, we believe that such an analysis must be completed. The emissions limitations included in the permit might very well turn out to be adequate, but as we understand the PSD regulations, a BACT analysis must be performed for each emission unit at the Masonite facility where there has been a net increase in emissions of VOCs. 40 C.F.R. § 52.21(j)(3).[29] Those regulations do not contain an exemption from the BACT requirement for emissions that the Region neglected to consider in its original BACT analysis and would be inconvenient to consider at a later stage of the permit process. Neither do the regulations allow the Region to establish ad hoc "de minimis" exceptions to the BACT requirement. We are therefore remanding this issue to the Region to do a BACT analysis for VOC emissions from the drying ovens.

As for CHU's third concern—that the Region's PSD review of the Press Line included only those VOC emissions arising from the linseed oil—the Region responds that all VOCs from the Press Line, not just those from the linseed oil, are ducted to the RTO where they are incinerated without regard to their source. CHU has offered no basis to question the Region's representations on this issue. Hence, we are denying review of this issue.

5. *Emission Rate Requirements in NPRM*

The permit limitations for VOC and PM10 emissions from the Coe and Moore dryers and the limitation for PM10 emissions from the cutting operations are expressed as limitations on the tons per year of such emissions. The permit, however, does not contain limitations on the lbs. per hour of such emissions. CHU believes that current EPA policy, as revealed in a recent notice of public rulemaking ("NPRM") at 59 Fed. Reg. 23,264 (May 5, 1994), favors the use of limitations that are expressed in lbs. per hour. The NPRM contains a proposed federal implementation plan for Sacramento and Ventura districts, which are

[29] *See supra* n.7.

non-attainment areas. The plan does not apply to Mendocino County where the Masonite facility is located. The NPRM states that a "condition which reflects BACT in a manner consistent with testing procedures, such as ppmv NOx, g/l VOC or lbs/hr, shall be contained in the latest Authority to Construct and Permit to Operate." *Id.* There is nothing in the NPRM to suggest that the quoted sentence reflects an Agency wide policy requiring the Region to craft the limitations in question as restrictions on the lbs/hr of VOC emissions. While the Agency does favor permit limitations "of a short term nature," New Source Review Workshop Manual at H-5, there is no rule or policy requiring such limits. Rather, the Agency has discretion to express the emissions rate in periods of time longer than one hour. CHU has not met its burden of demonstrating that the Region's exercise of discretion in this case was so unreasonable as to warrant review. Accordingly, review of this issue is denied. *See Interpower, supra,* at 26 (where petitioner argued for a 3-hour NOx limit, rather than the "24-hour rolling average emission, review was denied because petitioner had "not provided the Board with any reasons for questioning the Region's conclusion.").[30]

6. *Fugitive VOC Emissions from the Wood Chips*

CHU contends that the Region clearly erred in failing to consider VOC emissions from the dumping of wood chips at the facility. The Region acknowledges that wood chips would emit some VOCs, and it therefore concedes that such emissions must be considered in the PSD analysis to the extent they can be quantified.[31] It states, however, that it has accepted Masonite's demonstration that the fugitive emissions

[30] CHU also argues that in establishing annual emissions limitations, the Region assumed that Masonite will be operating 24 hours a day, 365 days a year (8760 hours), while Masonite claims that it actually operates only 8000 hours per year. CHU argues that the permit should be remanded for emissions limits that reflect Masonite's actual hours of operation, rather than the greatest possible potential emissions. The Region responds that CHU did not raise this issue during the comment period even though it was reasonably ascertainable at that time. Region's Response to Appeal and Petition for Review at 42-43. In its petition, CHU did not demonstrate that this issue was raised during the comment period or that it was not reasonably ascertainable at that time, and in its reply brief, CHU does not dispute the Region's assertion that CHU did not raise the issue during the comment period. We conclude, therefore, that this issue has not been preserved for review. *See, supra,* n.9.

[31] Because the Region concluded that the addition of the MPL would be a major modification, it was required to perform a BACT analysis for any pollutant, including VOCs, for which there was a significant net emissions increase attributable to the addition of the MPL. This BACT analysis must be performed for any part of the facility from which such increased emissions are emitted. 40 C.F.R. § 52.21(j)(3) (The BACT requirement "applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in method of operation in the unit."). To determine whether emissions from the wood chips have increased, however, the emissions must be quantifiable. This is not always possible with fugitive emissions, since by definition fugitive emissions are those that "could not reasonably pass through a smoke stack, chimney, vent, or other functionally equivalent opening." 40 C.F.R. § 52.21(b)(20).

from the wood chip piles cannot be quantified because there are no emissions factors for VOC emissions from such a source.[32, 33] The Region has included a permit condition, however, that will require Masonite to use good air pollution control practices "consistent with the PSD regulation for those types of sources." Region's Response to Appeal and Petition for Review at 44.

CHU argues that the Region has not provided any explanation for why it failed to require quantification of the wood chip emissions now, given that the facility has been operating for years with the new MPL line. CHU describes the permit condition mentioned above as "a vague, weak permit limit * * *."

Fugitive emissions need only be quantified for PSD purposes to the extent practicable. New Source Review Workshop Manual at A-9. CHU has not provided us with any basis for questioning the Region's technical judgment that quantification of VOC emissions from the wood chips is not presently practicable. We conclude, therefore, that CHU has not carried its burden of identifying a clear error, important policy consideration, or exercise of discretion that warrants review. Accordingly, review of this issue is denied.

B. *Emissions from Sources Other than the MPL*

CHU argues that there were increases of emissions at other parts of the facility that occurred contemporaneously with the addition of the MPL. CHU contends that the Region was obligated to determine the extent of these other emissions so that it could add them into its determination of whether there were any significant net emissions increases of regulated pollutants. In support of its argument, CHU points to undisputed evidence that fuel use at these other parts of the facility increased contemporaneously with the addition of the MPL and that steam production from Boiler #4 increased at the same time. CHU

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[32] An EPA-issued guidance document listing emissions factors for various sources (the AP-42 Document), which is widely used by permitting authorities and industry alike, contains a description of emissions factors, which reads in part:

> An emission factor is a *representative value* that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. These factors are usually expressed as the weight of the pollutant (e.g., kilograms of particulate emitted per megagram of coal burned).

Compilation of Air Pollutant Emission Factors, Vol. I: Stationary Point and Area Sources, U.S. EPA, AP-42 (5th Ed., 1994) (emphasis in the original).

[33] Masonite also asserts that emissions from wood chips piles "should be relatively insignificant." Masonite's Response to Appeal and Petition for Review at 64.

believes that an increase in fuel use and steam production point to an increase in emissions of regulated pollutants as well.

When the issue was raised during the comment period, the Region responded with factual assertions supporting its conclusion that any increase in fuel usage and steam production at Boiler #4 did not result in increased emissions of regulated pollutants. It also responded with the legal argument that even if there were an increase of a regulated pollutant at Boiler #4, such an increase would be subject to PSD review only if the increase constituted a net emissions increase.[34] The Region contends that, in determining whether there was a net emissions increase at Boiler #4, any increase in a regulated pollutant from Boiler #4 (indicated by the increase in steam emissions) would not be counted because Boiler #4 is subject to an existing PSD permit. In support of this position, the Region cites the definition of "net emission increase" at 40 C.F.R. § 52.21(b)(3)(iii), which provides, among other things, that for purposes of being counted as a net emissions increase, "an increase or decrease in actual emissions is creditable only if the Administrator has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs." This provision is discussed in EPA's New Source Review Workshop Manual at A.40, which explains that:

> An emissions increase or decrease is creditable only if the relevant reviewing authority has *not* relied on it in issuing a PSD permit for the source, and the permit is still in effect when the increase in actual emissions from the proposed modification occurs. A reviewing authority relies on an increase or decrease when, after taking the increase or decrease into account, it concludes that a proposed project would not cause or contribute to a violation of an increment or ambient standard. In other words, an emission change at an emissions point which was considered in the issuance of a previous PSD permit for the source is *not* included in the source's "net emissions increase" calculation. This is done to avoid "double counting" of emissions changes.

The Region concludes that, because Boiler #4's emissions are currently limited by an existing PSD permit, and because any increase in emis-

[34] As noted previously, section 52.21(j)(3) provides that in the context of a major modification, the BACT requirement "applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation of the unit."

sions of a regulated pollutant (suggested by the increase in steam production) would not exceed the limits in that permit, then that emissions increase was relied on by the authority that issued the permit, within the meaning of section 52.21(b)(3)(iii). The Region concludes, therefore, that the emissions increase at Boiler #4 is not creditable as a net emissions increase, and that such emissions are not subject to PSD review.

In its appeal, CHU challenges the factual assertions in the Region's response to comments, but not its legal argument that Boiler #4 is already subject to an existing PSD permit. Appeal and Petition for Review at 26. Nor does CHU challenge the Region's legal argument in its reply brief, except to assert that the existing permit that applies to Boiler #4 has been violated on more than one occasion, citing the response to comments as support. Petitioner's Reply Brief in Support of Appeal And Petition for Review at 27. Because the increase in steam emissions at Boiler #4 provides the primary factual basis for CHU's contentions regarding increases in steam production at the facility and because CHU has not even attempted to refute the Region's argument that emissions of a regulated pollutant from Boiler #4 would be subject to an existing PSD permit, we conclude that CHU has failed to identify a clear error, important policy consideration, or exercise of discretion that warrants review. Accordingly, review of this issue is denied.

C. *Ambient Air Quality Analysis of VOC Emissions*

CHU argues that the Region should have required Masonite to do a full ambient air quality analysis for VOCs. A permit application for a major modification is required to contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect. 40 C.F.R. § 52.21(m)(1)(i). Such analysis is required for a particular pollutant only if the major modification would result in a significant net emissions increase in that pollutant. *Id.* A modification may be exempted from this requirement at the Region's discretion, however, if the net emissions increase of the pollutant would cause air quality impacts less than amounts specified at 40 C.F.R. § 52.21(i)(8). That provision lists ozone but does not specify any amount. However, the listing for ozone in that provision is followed by a footnote, which reads as follows:

> No *de minimis* air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds subject to PSD would be required to perform an ambient impact analysis including the gathering of ambient air quality data.

40 C.F.R. § 52.21(8)(i) (note 1).

The Region determined that the *net* emissions increase of VOCs from the MPL and other contemporaneous increases in emissions at the source total 97.5 tons per year (*i.e.*, 141.9 tpy - 43.4 tpy). The Region concluded, therefore, that the regulations did not require the applicant to do a full ambient air quality analysis.[35]

CHU challenges this conclusion on two grounds. First, it challenges the representativeness of the years selected by the Region as the baseline from which to calculate the net emissions decrease of VOCs from the elimination of the Duolox line. Second, CHU argues that, even if the net emissions increase did not exceed the 100 ton per year threshold requiring a full ambient air quality analysis, the Region nevertheless has the discretion to order a full ambient air quality analysis, and the Region's failure to require one in this case amounts to an abuse of discretion.

The Region responds that the first issue was never specifically raised during the comment period. CHU counters in its reply brief that Antonio Andrade of the Citizens for Adequate Review ("CFAR") raised the issue during the public hearing, and CHU quotes excerpts from the statement that Mr. Andrade apparently read during the hearing. CHU's Reply Brief at 19-20. We have read Mr. Andrade's statements in context, however, and we conclude that Mr. Andrade nowhere questions,

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[35] The Region calculated the "net emissions increase" for VOCs from the MPL, by subtracting the tons per year of "actual emissions" reduced as a result of the shutdown of the Duolox Line from the facility's "potential to emit" with the MPL in operation. Potential to emit is defined as follows:

> *Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

40 C.F.R. § 52.21(b)(4). In calculating the MPL's potential to emit, the Region considered the following federally-enforceable conditions in the permit: (1) a limit on the VOC emissions from the Grain Line of 132 tpy; (2) a limit on the VOC emissions from the RTO on the Press Line of 1.62 pounds per hour averaged over a three-hour period; (3) a limit on the annual production for the MPL of 170 million square feet of product per any twelve-month period; (4) a limit on the total volume of natural gas consumed by the Coe Dryer, the Moore Dryer, the Grain Line dryers, and the RTO of 625 million feet in any twelve-month period; and (5) limits on the annual maximum gallons of coating material for the Grain Line and on the maximum VOC content lb VOC/gal. without water. The Region concluded that the facility's potential to emit VOCs is 141.9 tpy. To determine the reduction of actual emissions attributable to the phase-out of the Duolox line, the Region calculated the average emissions from the Duolox line during the years 1986 and 1987, arriving at a figure of 43.4 tpy.

either directly or indirectly, the representativeness of the years 1986 and 1987 as baseline years for those calculations. Rather, we read Mr. Andrade's statements as expressing the concern that when the Region calculated emissions from the Duolox line, it inappropriately based its calculations on the assumption that the Duolox line was operating at 100% capacity, when in reality the Duolox line was operated at only 30% capacity.[36] We conclude, therefore, that the representativeness of 1986 and 1987 as baseline years was not raised during the public comment period, even though it was reasonably ascertainable at that time. Hence, the issue has not been preserved for review. *See* 40 C.F.R. §§ 124.13 & 124.19(a) (an issue that is reasonably ascertainable during the comment period must be raised at that time by someone (not necessarily the petitioner) if it is to be preserved for review); *In re Patowmack Power Partners, L.P.*, PSD Appeal Nos. 93-13, 93-14, at 3 (EAB, Feb. 24, 1994) (same); *In re Ogden Martin Systems of Onondaga, Inc. and Onondaga County Resource Recovery Facility*, PSD Appeal No. 92-7, at 3, n.4 (EAB, Dec. 1, 1992) (same).[37]

As noted above, CHU also argues that, even if the net emissions increase did not exceed the 100 ton per year threshold requiring a full ambient air quality analysis, the Region nevertheless has the discretion to order a full ambient air quality analysis. CHU suggests that the Region was not aware that it had this discretion and therefore did not even consider requiring an air quality analysis. CHU believes that this failure to consider requiring a full ambient air quality analysis amounts to an abuse of discretion.

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[36] In its response to Mr. Andrade's comments, the Region did include a very brief and conclusory statement that the years 1986 and 1987 were chosen as baseline years because the Region considered them more representative than the two preceding years. CHU seizes on this statement as evidence that the issue was raised, arguing that "[a]n issue is deemed sufficiently raised during the comment period where the permit issuer addresses it, thereby indicating it warranted a response." Reply Brief at 20. It is clear from the context of the Region's response, however, that the Region did not make the statement in response to a perceived challenge to the representativeness of those two years. Indeed, the best indication of what issue the Region thought it was responding to is the Region's own paraphrase of that issue immediately preceding its response. The Region's paraphrase makes it clear that the Region thought Mr. Andrade was raising an entirely different issue, *i.e.*, whether its calculations concerning the Duolox line were inappropriately based on the maximum allowable emissions (as opposed to the actual emissions) of the Duolox. Response to Comments at 22. Thus, we conclude that the Region's statement concerning the representativeness of 1986 and 1987 does not indicate that the issue was raised by Mr. Andrade. Presumably, the statement was gratuitously added to the Region's response merely to provide more information to the public regarding the general topic of the Duolox line.

[37] Even if the issue had been raised during the public comment period, however, we would have denied review of it. For the purposes of determining the full decrease in emissions from the elimination of the Duolox line, 1988 and later years would not be representative of normal operations because in 1988 emissions from that line had begun to decrease due to preparations for the MPL line. "Summary of Production Rates and Operating Hours" for the years 1987-1991, Attachment U, Region's Response to Appeal and Petition for Review.

CHU's argument is rejected. While CHU is correct that the Region has discretion to order a full ambient air quality analysis even in cases where VOC emissions do not meet the 100 tpy threshold, we cannot conclude that the Region's failure to exercise that discretion in this case amounts to an abuse of discretion. In fact, even though the Region concluded that Masonite was not required under the rules to do a full ambient air quality analysis, the Region nevertheless required Masonite to do what the Region describes as "a brief analysis of the air quality impacts resulting from the MPL using the Scheffe Tables." Region's Brief at 37. The Region also required Masonite to include in its application the results of VOC modeling that Masonite had conducted for Mendocino County to comply with California's air toxics law. The Region's actions demonstrate that the Region knew it had the discretion to require an air quality analysis, and considered the extent to which such an analysis would be useful and appropriate in this case. CHU has not pointed to anything in the record suggesting that the Region's judgment in this case amounts to an abuse of discretion. We are therefore denying review of this issue.

D. *PM10 Emissions*

The Region concluded that, of all the pollutants regulated under the Act and emitted by the Masonite facility, VOCs (as a proxy for ozone) were the only pollutant for which there was a significant net emissions increase attributable to the addition of the MPL or contemporaneous changes. Although it is not entirely clear from CHU's petition, CHU apparently contends that there was also a significant net emissions increase in PM10 emissions. CHU believes that the Region's conclusion to the contrary is based on two fundamental errors. First, the Region erroneously estimated PM10 emissions from the baghouse on the cutting line ("Baghouse #5"), and second, it erroneously neglected to consider other sources of PM10 emissions.

In its review of PM10 emissions from the facility, the Region calculated that 6.2 tpy of PM10 emissions are attributable to the addition of the MPL, including 1 tpy from Baghouse #5. Ambient Air Quality Report, Attachment C, Region's Response to Appeal and Petition for Review. It also calculated that a *reduction* of 10.3 tpy of PM10 emissions is attributable to the phase-out of the Duolox line. *Id.* The Region concluded, therefore, that the net emissions "increase" of PM10 would actually be a decrease of 4.1 tpy. *Id.* The PSD significance level for PM10 is 15 tpy. 40 C.F.R. § 52.21(b)(23)(i). Although the Region concluded that PM10 emissions attributable to the addition of the MPL and other contemporaneous changes do not exceed the significance level for that pollutant, the permit contains conditions limiting PM10

emissions from the MPL line to 6.2 tpy, and specifically limiting emissions from Baghouse #5 to 1 tpy. Final Permit.

During the comment period, CHU noted that the Region's belief that Baghouse #5 emitted only 1 tpy of PM10 was based on the manufacturer's guarantee that the control efficiency of the baghouse is 99.99%. In its comments, CHU expressed the belief that the control efficiency is really closer to 99.7% (a figure apparently based on the Handbook of Environmental Control, Vol.1, p. 417., excerpts of which were submitted to the administrative record by Masonite).[38] CHU concluded, therefore, that 30 tpy, rather than 1 tpy, are emitted from Baghouse #5.

In its response to comments, the Region acknowledged that the 0.01 factor used in the Region's calculations for the baghouse (resulting from a control efficiency of 99.99%) is based on a manufacturer guarantee submitted by Masonite as part of its PSD Application. The Region explained that "EPA is able to base emissions limits on a manufacturer's guarantee, which is sometimes the best available information." Region's Response to Comments at 13, Attachment I, Region's Response to Appeal and Petition for Review. The Region states, however, that CHU's comment prompted it to request Masonite to submit any available source test results, and that Masonite responded by submitting a source test report by the California Air Resources Board ("CARB") dated August 21, 1992. That test showed PM emissions from Baghouse #5 of 8.9 tpy. The Region realized that if the CARB test results were accurate, then Masonite would not be able to comply with the 1 tpy limit on PM10 emissions from Baghouse #5. It brought the matter to Masonite's attention, and in response, Masonite hired a contractor to perform a 201A test in conjunction with Method 202 (both approved EPA methods) to determine the amount of PM10 emissions from Baghouse #5. It determined that PM10 emissions from the baghouse are 0.53 tpy. The Region concluded, therefore, that the Baghouse could achieve the 1 tpy emission rate in the permit. The Region states that although it is satisfied with the results of the test, it nevertheless added baghouse maintenance requirements in the permit, requiring Masonite to install a continuous baghouse leak detection device.

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[38] In its petition, CHU states that the control efficiency of Baghouse #5 is 99.97%. Appeal and Petition for Review at 36. Yet at the same time, CHU's petition also refers approvingly to a comment made during the public comment period, which states that the control efficiency of Baghouse #5 is 99.7%. Response to Comments at 12. Based on CHU's further assertion that Baghouse #5 will emit 30 tpy, or 30 times the amount calculated by the Region, we assume that CHU intended to use the 99.7% figure. Our analysis is the same in any event.

On appeal, CHU argues that the Region should not have relied on the results of a test performed by a contractor that was hired and paid by Masonite. CHU contends that the Region "rejected the only independent evidence in the record regarding the likely emissions from this baghouse [*i.e.*, the Environmental Control Handbook]". Appeal and Petition for Review at 36.

CHU's position is rejected. We cannot fault the Region for placing greater reliance on a test that measured PM10 emissions from the particular baghouse in question, using EPA approved protocols, than it places on a statement in the Handbook of Environmental Control to the effect that similar technologies generally achieve lower control efficiencies. We conclude, therefore, that CHU has failed to identify any clear error, policy consideration, or exercise of discretion warranting review in the Region's decision concerning PM10 emissions from Baghouse #5.

Other Baghouses: CHU also argues that Baghouse #5 was not the only part of the dust collection system affected by the modification. It asserts that PM10 emissions from other baghouses should have been considered in the PSD analysis. CHU, however, does not offer any basis for its position. We conclude, therefore, that it has not identified any clear error or exercise of discretion warranting review.

Fugitive PM10 Emissions from Wood Chips: CHU also notes that the addition of the MPL to the facility has resulted in an increase in the use of wood chips. CHU argues that "fugitive emissions" of PM10 arise when conveyer belts operate to transport the chips from the dumping site to the "log deck" where they are dumped off. CHU points out that Masonite does not describe any pollution prevention measures to contain dust once the chips are dumped from the truck. When CHU raised this issue during the comment period, the Region responded as follows:

> To begin, the PSD regulations provide that fugitive emissions at a stationary source shall not be included in determining whether the source is a major source under PSD requirements, unless the source is one of 28 listed source categories." 40 C.F.R. § 52.21(b)(1)(iii). The Masonite facility is not one of the 28 listed facility types, and EPA did not, therefore, consider fugitive emissions in calculating the MPL modification's potential to emit for the PSD applicability determination. EPA's exclusion of fugitive emissions from the PSD applicability determination complies with the PSD regulations.

Region's Response to Comments at 11, Attachment I, Region's Response to Appeal and Petition for Review.

We believe that the Region's legal conclusion—that it cannot consider fugitive emissions in calculating the net emissions increase of PM10 attributable to the major modification of the facility—is clearly erroneous. The Region has confused two distinct inquiries, which are subject to different standards. The Agency has previously described the difference between the two inquiries as follows:

> A threshold applicability determination is distinct from a pollutant applicability determination, which is a determination of which pollutant streams from a "major" source or "major" modification are subject to the substantive requirements of the regulations in question. The P.S.D. requirements, for instance, apply to each regulated pollutant that a "major" source emits in "significant" amounts, e.g., 40 CFR 52.21(j) (1984). The regulations do not distinguish between stack and fugitive emissions for this purpose.

54 Fed. Reg. 48870 (Nov. 28, 1989). For our purposes, the first inquiry is whether the addition of the MPL constitutes a major modification based on the increased emissions of *any* regulated pollutant. For purposes of that inquiry, fugitive emissions may not be counted. *See* 40 C.F.R. § 52.21(i)(4)(vii) (PSD requirements do not apply if "the modification would be a * * * major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the * * * modification and the source does not belong to any of [a specified set of industry] categories * * *."). In this case, all parties agree that the addition of the MPL will result in a significant net emissions increase of VOCs (and therefore a significant net emissions increase of ozone) without counting fugitive emissions of VOCs. Thus, there is no question that the addition of the MPL constitutes a major modification of the source. The first inquiry, therefore, is concluded.

As noted above, once it has been established that the modification is major, a second, distinct inquiry must be made: for which pollutants emitted from the source must a BACT analysis be performed? The regulations require that a BACT analysis be performed on any regulated pollutant for which there has been a significant net emissions increase attributable to the major modification. 40 C.F.R. § 52.21(j)(3) ("A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source.").

The definition of "net emissions increase" includes "*any* increase in actual emissions" resulting from a particular change in the source's physical structure or method of operation or "*any* other increase or decrease in actual emissions" that occurs contemporaneously with such a change. 40 C.F.R. § 52.21(b)(3) (emphasis added). The definition does not contain a prohibition against counting fugitive emissions. *Id.* The prohibition against counting fugitive emissions that applied during the first inquiry, therefore, does not apply during this second inquiry. *See* New Source Review Workshop Manual at A-10 ("Note also that, if a source has been determined to be major, fugitive emissions, to the extent they are quantifiable, are considered in any subsequent analyses (e.g., air quality impact).").

Under the regulations discussed above, once the Region determined that the addition of the MPL constituted a major modification on the basis of non-fugitive VOC emissions, the Region was required to count fugitive emissions (if quantifiable) of any other regulated pollutant when determining whether a BACT analysis was required for such pollutant. One such pollutant considered by the Region was PM10. In light of the foregoing considerations, we conclude that the Region erred in not counting increases in fugitive emissions of PM10 that may have occurred or will occur from the handling of wood chips at the facility as a result of the major modification. We are therefore remanding this issue to the Region to reconsider its determination that there was not a significant net emissions increase of PM10. Its reconsideration should consider any increase of fugitive emissions, to the extent quantifiable, from the dumping of wood chips at the facility. If such emissions, when added to any other increases in PM10 emissions, would exceed the 15 tpy significance level for PM10 emissions, the Region must do a BACT analysis for PM10 emissions.

PM10 Emissions from the Hogger. CHU also contends that the Region erred by failing to consider PM10 emissions from the "hogger," which is a dust collection baghouse at the facility. When this argument was raised during the comment period, the Region responded that:

> The main hogger ("hogger") has been a part of the Masonite facility since 1978. It is routed to a cyclone which separates the dust to go to Boiler #4 and routes emissions to a baghouse ("hogger baghouse"). EPA accepts Masonite's explanation that because all hogger emissions go through the hogger baghouse, there are no hogger vents and none are shown on fugitive emissions diagrams. Neither the hogger nor the hogger baghouse had any contemporaneous emissions increases related to the MPL

> modification. Therefore, the hogger and the hogger baghouse are not addressed in the review for the PSD permit for the MPL modification.

Region's Response to Comments at 18, Attachment I, Region's Response to Appeal and Petition for Review.

On appeal, CHU argues that it was clearly erroneous for the Region to accept Masonite's representations concerning the Hogger. CHU believes that the Region should have performed an in-operation inspection of the hogger, rather than relying on Masonite's assurances. CHU contends that, in cases like this where the permit applicant "kept secret" its modification of the facility, the Region should not rely on the representations of the permittee.

We do not believe that it was unreasonable for the Region to rely on Masonite's representations on the question of emissions from the hogger. The Agency's PSD regulations do not require (and Agency resources do not permit) the Region to conduct a full investigation of every detail of a permit application. The Region of necessity can rely on the information supplied to it by the permittee (under penalty of law for false statements) so long as the Region does not see any reason to question a particular piece of information. *See Inter-Power, supra*, at 21 ("Permit issuers must be free to exercise expert judgment and rely on data they conclude are more accurate or comprehensive."). We conclude that CHU has failed to identify any clear errors, policy considerations, or exercises of discretion warranting review.

E. *Additional Modifications of the Permit*

CHU believes the permit should include the following four modifications to the permit.

Continuous Automatic Monitoring: CHU believes that the permit should contain a provision requiring Masonite to perform continuous automatic monitoring of the RTO temperature. The existing permit term requires monitoring but does not specify how the monitoring is to be carried out. The Region responds that CHU's idea is a good one, but rejects it because CHU did not raise it during the public comment period. In its reply brief, however, CHU demonstrates convincingly that it did in fact raise the issue during the public comment period. Petitioner's Reply Brief at 31-32.[39] Because CHU did preserve the issue for review, and

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[39] On January 28, 1994, CHU submitted a set of comments on the draft permit, including the following statements:

Continued

because the Region stated that the idea is a good one, we are remanding this issue to the Region for reconsideration. On remand, the Region is directed either to include a requirement for continuous automatic monitoring of the RTO temperature or to explain why upon further consideration such a condition would not be a good idea after all.

Limitations on the Use of Trial Coatings: The permit allows Masonite to experiment with "trial" coatings for use on the Grain Line. CHU contends that the permit allows excessive VOC emissions during a non-defined trial period. CHU is concerned that "[w]hile trial emissions will be subtracted from allowable emissions over a year's time, they could contribute to a temporary ozone problem or secondary toxic impacts." Appeal and Petition for Review at 41. In its response, the Region points out that the issue was not raised during the comment period. In its reply brief, CHU does not dispute this assertion or attempt to demonstrate that it did raise the issue during the comment period. Accordingly, we conclude that the issue was not raised during the comment period even though it was reasonably ascertainable at that time. We conclude, therefore, that the issue has not been preserved for review.[40]

The Opacity CEMS: Condition XI.6 of the permit requires Masonite to operate an opacity CEMS in the exhaust stack of the RTO to measure continuously the opacity of stack emissions. CHU believes that the CEMS should allow for remote recording to the MCAPCD with an automatic alarm. The Region responds that an alarm might be appropriate in certain instances, as when an exceedance of emission limits causes an immediate danger to the public, but it does not believe that an alarm is necessary in this case. It also argues that this issue was not raised during the comment period. In its reply brief, CHU correctly points out that it did comment that

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> Masonite's past performance history, based on a pattern of applications for emergency variances and subsequent violations of the variance conditions, requires the installation of control technologies which are less susceptible to human error. Masonite's failure to comply with the law, demonstrated by the unpermitted construction and operation of the MPL new emissions source, further supports the need for an automatic, continuous monitoring system to ensure compliance and avoid enforcement problems. * * *
>
> Permit conditions must include the implementation of continuous automatic monitoring of Masonite's emissions (including VOC, CO, NOx, PM10, and opacity CEMS) and operations (including fuel consumption and oxidizer chamber temperature) with remote reporting to Mendocino County Air Pollution Control Office.

Letter from Golden Gate University Environmental Law and Justice Clinic on behalf of CHU to Barbara Witter of EPA at 18-19 (Jan. 28, 1994).

[40] *See, supra*, n.9.

the opacity CEMS should have remote recording to the MCAPCD. We conclude, therefore, that the issue was preserved for review. Upon reviewing the merits of CHU's argument, however, we conclude that CHU has not adequately demonstrated that the Region's failure to require remote recording to the MCAPCD with automatic alarm involves a clear error, policy consideration, or exercise of discretion that warrants review. Accordingly, we are denying review of this issue.

The Provision for Baghouse #5: In its Appeal and Petition for Review, CHU argues that "[t]his provision for baghouse #5 should apply to all of the other baghouses as discussed above." Appeal and Petition for Review at 42. CHU does not specify which "provision" it is referring to, but the only permit provision dealing with Baghouse #5 that we are aware of is Condition XI.8, which requires Masonite to connect a broken-bag leak detection device to Baghouse #5. Earlier, we concluded that CHU had failed to demonstrate that there have been increases in PM10 emissions from all of the other baghouses at the facility. We conclude, therefore, that such baghouses are not subject to PSD review. Review of this issue is therefore denied.

III. *CONCLUSION*

For all the foregoing reasons, we are remanding the following issues for reconsideration by the Region: (1) whether the emissions limitations representing BACT for the Grain Line should be based on a combination of water-borne coatings and RTO incineration; (2) what emissions limitation is BACT for VOC emissions from the dryer ovens; (3) whether fugitive emissions of PM10 from the wood chips (if quantifiable) in combination with other increases in PM10 emissions at the facility constitute a significant net emissions increase of PM10, thereby subjecting PM10 emissions to PSD review; and (4) whether to include a requirement for continuous automatic monitoring of the RTO temperature. Upon completion of the remand proceedings, an appeal to the Board will *not* be necessary to exhaust administrative remedies. *See* 40 C.F.R. § 124.19(f).[41] With respect to the other issues raised in CHU's petition, CHU has failed to identify any clear errors, policy matters, or exercises of discretion that warrant review. Review of those issues is therefore denied.

So ordered.

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[41] Although § 124.19 of the rules contemplates that additional briefs will be submitted upon the grant of a petition for review, a direct remand without additional submissions is appropriate where, as here, it does not appear that further briefs on appeal would shed light on the issues to be addressed on remand. *See, e.g., In re Sandoz Pharmaceuticals Corporation*, RCRA Appeal No. 91-14, at 13 (EAB, July 9, 1992).