

**IN RE ROCHESTER PUBLIC UTILITIES**

PSD Appeal No. 03-03

***ORDER DENYING REVIEW***

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Decided August 3, 2004

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## Syllabus

Through a Petition for Review, the Minnesota Center for Environmental Advocacy (“Petitioner”) seeks Board review of a Prevention of Significant Deterioration (“PSD”) permit approved by the Minnesota Pollution Control Agency (“MPCA”) pursuant to the federal Clean Air Act. The permit would allow Rochester Public Utilities (“RPU”) to make a major modification to its existing Silver Lake Plant without requiring application of the best available control technology (“BACT”) to control certain pollutant emissions from the plant.

RPU’s Silver Lake Plant is a coal-fired steam electric generating facility. The Silver Lake Plant currently consists of four boilers, each of which is connected through steam pipes to its respective turbine generator. RPU proposes to construct and operate an underground high-pressure steam line that would run from its Silver Lake Plant to the Mayo Clinic’s Prospect Utility Plant (“Mayo Plant”). Boiler Numbers 1, 2, 3, and 4 were constructed in 1949, 1952, 1962, and 1969, respectively. Steam from the Silver Lake Plant would be used to generate electricity at the Mayo Plant, the latter of which has its own steam turbine, and any waste heat would be used for building heating. To provide steam for the project, RPU would tap into its existing steam lines between each boiler and its respective steam turbine. From these taps, steam from all four boilers would be routed to a single pipeline to provide steam from the Silver Lake Plant to the Mayo Plant. The project will not involve any physical alteration to any of the boilers. The proposed plant modifications would result in the annual burning of approximately 73,700 additional tons of high-sulfur coal at RPU’s plant, which approximates to a 50% increase in annual coal consumption rates from that plant, compared to year 2000 consumption levels.

MPCA found that the project would constitute a major modification to a major stationary source, but determined that the BACT requirement only applies when there is a modification to an “emissions unit.” The U.S. Environmental Protection Agency (“EPA”) amended the definition of “emissions unit,” by adding a reference to the term electric utility steam generating unit (“EUSGU”), effective March 3, 2003. Despite the latter regulatory amendment, MPCA concluded that RPU’s project would not physically modify an “emissions unit” because the project consists of construction on the steam pipes, rather than the boilers. Accordingly, MPCA approved the permit without BACT.

In the Petition for Review — and in comments made to MPCA prior to its permitting decision — Petitioner challenges MPCA’s issuance of the BACT-less permit. Petitioner contends that, under the amended definition, RPU’s project would physically modify an “emissions unit,” and thus requires application of the BACT requirement. The particular

issue presented for review by the Petitioner is quite narrow: whether the plain text of the amended regulatory definition of “emissions unit” mandates that an EUSGU-type emissions unit includes more than just the boilers, but also includes the steam pipes and other ancillary equipment needed to produce electricity. Petitioner does not claim, in either its comments below or in the Petition for Review, that the pre-existing definition of “emissions unit” would require BACT for RPU’s project.

Held: The burden is on a petitioner to raise issues, and a petitioner carries the burden of demonstrating that review is warranted. Moreover, the Board is guided by language in the preamble to the regulation governing review, 40 C.F.R. § 124.19, that states the “power of review should be only sparingly exercised” and “most permit conditions should be finally determined at the Regional [or State] level.” Accordingly, the Board decides this matter on the narrow issue raised in the Petition for Review, concerning the recent regulatory amendment to the term “emissions unit.”

Although Petitioner presents a possible interpretation of an EUSGU emissions unit, it is by no means the only way to read the plain text of the regulation. The definition of EUSGU, without reference to the term’s intended purpose, is capable of being understood in two or more possible senses or ways. Therefore, it is permissible to look to the purpose of the amended regulation to determine its meaning and, ultimately, how it fits within the regulatory scheme.

In making its recent amendment to the definition of “emissions unit,” EPA did not exhibit any intent to impose BACT on modifications to an EUSGU’s steam pipes. Instead, the preamble to the amended PSD rules shows that EPA’s intent was that the new definition of “emissions unit” consolidate the methods of calculating future emissions from existing EUSGUs and non-EUSGU emissions units. Accordingly, the Board disagrees with the argument Petitioner submitted in its Petition for Review.

Following the decision of the Board on the issue Petitioner raised in the Petition for Review, each member of the panel filed a separate supplemental opinion. Judge McCallum filed a supplemental opinion questioning the propriety of not including BACT limitations in PSD permits generally; Judges Fulton and Stein each filed a supplemental opinion in response to Judge McCallum’s opinion.

***Before Environmental Appeals Judges Scott C. Fulton, Ronald L. McCallum, and Kathie A. Stein.***

***Opinion of the Board, Per Curiam. Each member of the panel filed a separate supplemental opinion, following the per curiam opinion of the Board:***

## I. INTRODUCTION

Before the Environmental Appeals Board (“Board”) is the Petition for Review (or “Petition”) filed by the Minnesota Center for Environmental Advocacy (“MCEA” or “Petitioner”), seeking review of a Prevention of Significant Deterioration (“PSD”) permit approved by the Minnesota Pollution Control Agency

("MPCA"), pursuant to the federal Clean Air Act ("CAA" or "Act").<sup>1</sup> The permit would allow Rochester Public Utilities ("RPU" or "Permittee") to modify its existing facility, in order to construct a high-pressure steam line from its Silver Lake Plant to the Mayo Clinic's Prospect Utility Plant ("Mayo Plant"), without requiring application of the best available control technology ("BACT") to control certain pollutant emissions from the Silver Lake Plant. This is RPU's first PSD permit for its facility. Petitioner opposes RPU's permit because it does not require RPU to apply BACT.

Petitioner contends that as a result of a recent regulatory amendment, the United States Environmental Protection Agency ("EPA" or "Agency") changed the meaning of a key term governing the applicability of BACT to modified facilities. Specifically, the Agency revised the definition of the term "emissions unit" to incorporate the term "electric utility steam generating unit" ("EUSGU"). According to Petitioner, this revision effected a change in the meaning of the term "emissions unit," and with it, a change in the type of facility that would be subject to BACT. The permit applicant and other participants in this proceeding argue that the revision had no such impact. Instead, they contend the revision was in the nature of a technical or conforming amendment, as part of a larger effort to redefine the manner in which the amount of emissions resulting from a modification are calculated. Accordingly, they argue that the meaning of "emissions unit" did not change, at least not in the manner suggested by Petitioner.

We disagree with Petitioner's assessment of the impact of the regulatory amendment. As discussed below, the purpose in changing the definition concerns the methodology for calculating future emissions and does not effect the changes Petitioner asserts. Accordingly, review is denied.

## II. BACKGROUND

Prior to early 2001, the Rochester, Minnesota area, where the Silver Lake Plant is located, was in nonattainment with respect to the national ambient air quality standards ("NAAQS") for particulate matter less than 10 microns in diameter ("PM<sub>10</sub>") and for sulfur dioxide ("SO<sub>2</sub>"). 66 Fed. Reg. 14,087 (March 9, 2001)

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<sup>1</sup> MPCA's authority to issue PSD permits is delegated by the United States Environmental Protection Agency. See 40 C.F.R. § 52.1234 (2003). Federal PSD regulations are incorporated and made part of Minnesota's plan to address air pollution. 40 C.F.R. § 52.1234(b) (2003) (incorporating 40 C.F.R. § 52.21(a)(2), (b)-(bb)). Because MPCA acts as EPA's delegate in implementing the federal PSD program within the State of Minnesota, a PSD permit issued by MPCA is considered an EPA-issued permit for purposes of federal law, and thus is subject to review by the Board pursuant to 40 C.F.R. § 124.19. See, e.g., *In re Kendall New Century Dev.*, 11 E.A.D. 40, 42 n.1 (EAB 2003); *In re West Suburban Recycling and Energy Ctr., L.P.*, 6 E.A.D. 692, 695 n.4 (EAB 1996) (citing 40 C.F.R. § 124.41 and 45 Fed. Reg. 33,290, 33,413 (May 19, 1980)).

(reclassifying the Rochester area to attainment for SO<sub>2</sub>); 60 Fed. Reg. 28,339 (May 31, 1995) (reclassifying the Rochester area to attainment for PM<sub>10</sub>). Pursuant to the Minnesota State Implementation Plan (“SIP”) amendment process, RPU was subject to administrative orders regarding its Silver Lake Plant.<sup>2</sup> Petition for Review, Ex. C (Excerpts from Rochester Public Utilities Application for Major (PSD) Amendment — Silver Lake Plant Steam Sale Project (July 20, 2001)) (hereinafter, “Permit Application”) at 2-1. As of early 2001, the Rochester area has been in attainment for all NAAQS. *Id.* A PSD permit is required before commencing construction of a major modification to a major stationary source in an attainment area as proposed by RPU, 40 C.F.R. § 52.21(a)(2) (2003), and RPU does not dispute that it is required to obtain a PSD permit.

The Silver Lake Plant, as the subject RPU facility is known, has a total nominal generating capacity of approximately 100 megawatts. Petition for Review, Ex. B (MPCA Findings of Fact, Conclusions of Law, and Order (June 27, 2003)) (hereinafter, “MPCA Order”) ¶ 1. The facility includes four boilers, which are pulverized coal-fired, dry-bottom boilers. *Id.* Boiler Numbers 1, 2, 3, and 4 were constructed in 1949, 1952, 1962, and 1969, respectively. *Id.*

All steam generated by those boilers is currently used for production of electric energy, using steam turbine generators. *Id.* ¶ 3. As for the facility’s current configuration, each of the four boilers connects to its own steam turbine through a main steam line. Petition for Review, Ex. C, Attach. (Electronic Mail Letter from Joe Hensel of RPU to John Chikkala of MPCA (May 22, 2001)). Each of those turbines is directly coupled to its respective generator. *Id.* “The individual main steam lines that connect boilers to turbines are *not* interconnected.” *Id.* The largest of the four boilers — Boiler Number 4 — is connected to a steam turbine generator having a capacity of approximately 60 megawatts. Petition for Review, Ex. D, Attach. 3(Technical Support Document for Draft Air Emission Permit No. 10900011-003 at 1 (June 10, 2003)) (hereinafter, “Tech. Support Doc.”).

Air pollutant emissions from these boilers are discharged through three stacks: a common 200 foot stack for Boilers 1 and 2, a second 200 foot stack for Boiler 3, and a 300 foot stack for Boiler 4. MPCA Order ¶ 1. For particulate control, Boiler Numbers 1 through 3 use multicyclones in series with electrostatic

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<sup>2</sup> The terms and conditions contained in past administrative orders for PM<sub>10</sub> and SO<sub>2</sub> were incorporated into RPU’s existing, non-PSD, Air Emission Permit No. 10900011-001 as federally-enforceable conditions for maintaining attainment status for those two pollutants. Permit Application at 2-1. MPCA issued the existing permit on July 22, 1997, under 40 C.F.R. part 70, which establishes state operating permit programs under Title V of the Clean Air Act. Petition for Review, Ex. B (MPCA Findings of Fact, Conclusions of Law and Order (June 27, 2003) ¶ 7.

precipitators (“ESPs”), whereas Boiler Number 4 uses only an ESP.<sup>3</sup> *Id.*

On July 20, 2001, RPU filed an application with MPCA for an amendment to the air emissions permit<sup>4</sup> for its Silver Lake Plant, in order to construct and operate an underground high-pressure steam line that will run from its Silver Lake Plant to the Mayo Plant. *Id.* ¶¶ 1-2, 8. RPU’s Silver Lake Plant produces steam, which would be used to generate electricity at the Mayo Plant with a steam turbine, and any waste heat would be used for building heating. *Id.* ¶ 4. All four boilers would be utilized for the project. Permit Application at 2-2. RPU’s project would tap into existing steam lines at RPU’s Silver Lake Plant but would not alter RPU’s boilers in any way. MPCA Order ¶ 2. To provide steam for the project, RPU would tap into its existing steam lines between each boiler and its respective steam turbine. Permit Application at 2-2. From these taps, steam from Boilers 1, 2, 3, and 4 would be routed to a single pipeline to provide steam from the Silver Lake Plant to the Mayo Plant. *Id.*; see also Administrative Record at 3166 (Stanley Consultants, Inc., Steam Piping and Instrumentation Diagram (June 6, 2001)) (hereinafter, “RPU Piping and Instrumentation Diagram”). A single underground 12-inch steam line, along with a 6-inch condensate return line will run between RPU’s Silver Lake Plant and the Mayo Plant. Permit Application at 2-2. The pipelines will be routed down existing city streets and through RPU’s property in Rochester. MPCA Order ¶ 2. RPU explains that the proposed steam purchase, from RPU to Mayo, is required to meet the additional steam heating loads of Mayo’s buildings, due to growth. Permit Application at 2-3. As for the proposed interconnections within RPU’s Silver Lake Plant, those interconnections would be made with piping, motor operated valves, manual valves, and other hardware, so that steam could only be supplied from a boiler to its existing turbine *or* to the interconnecting pipe, the latter of which leads to the Mayo Plant. *Id.* at 2-2; see RPU Piping and Instrumentation Diagram.

On December 31, 2002, EPA promulgated extensive revisions to portions of the PSD regulations, effective March 3, 2003 (hereinafter, “New PSD Rules”). Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Baseline Emissions Determination, Actual-to-Future-Actual Methodology, Plantwide Applicability Limitations, Clean Units, Pollution Control Projects, 67 Fed. Reg. 80,186 (Dec. 31, 2002). MPCA determined RPU’s permit application to be complete on March 17, 2003,<sup>5</sup> MPCA Order ¶ 8, and found

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<sup>3</sup> Other emissions sources at the Silver Lake Plant include a natural gas-fired steam heating boiler, coal handling, and coal-ash storage facilities. Tech. Support Doc. at 1.

<sup>4</sup> The amended permit is designated: PSD Permit No. 10900011-003.

<sup>5</sup> The parties do not dispute that the new PSD regulations apply to RPU’s permit application, as RPU’s permit application was not complete until after the new PSD regulations went into effect on March 3, 2003.

the Silver Lake Plant to be a major stationary source for purposes of PSD review. *Id.* ¶ 16. Furthermore, MPCA found that RPU's proposed plant modifications would result in the annual burning of approximately 73,700 additional tons of high-sulfur coal at RPU's plant, which approximates to a 50% increase in annual coal consumption rates from that plant, compared to year 2000 consumption levels. *Id.* ¶ 5. MPCA concluded that the proposed project would constitute a "major modification" under PSD review provisions. *Id.* ¶ 18(f).

On April 23, 2003, Petitioner submitted comments stating that the project would physically modify an "emissions unit" and thus required the use of BACT. Petition for Review, Ex. A (Comments of the Minnesota Center for Environmental Advocacy (April 23, 2003)) (hereinafter, "Petitioner's Comments") at 2-3, 5. MPCA responded by disagreeing with Petitioner's Comments and stated the reasons for that disagreement. Petition for Review, Ex. D, Attach. 5 (Office Memorandum of Craig D. Thortenson, Staff Engineer, Majors and Remediation Division, MPCA (May 29, 2003)) (hereinafter, "MPCA Staff Memorandum"); MPCA Order ¶¶ 16-18. On June 27, 2003, MPCA approved the permit, which did not require the use of BACT, because MPCA determined that there would not be a modification to an "emissions unit." MPCA Order ¶¶ 16-18.

Petitioner filed the Petition for Review on July 24, 2003. MPCA filed a Response to the Petition for Review, along with an index to and excerpts from the administrative record. MPCA's Response to Petition for Review (Aug. 29, 2003). RPU moved to intervene and for leave to file a response brief, which RPU attached to its motion. RPU's Motion for Leave to Intervene and File Response to the Petition for Review filed by MCEA (Sept. 2, 2003). Petitioner moved for leave to file a reply to both MPCA and RPU, which Petitioner attached to its motion. MCEA Motion for Leave to File a Reply (Sept. 8, 2003). The Board granted the motions of both Petitioner and RPU.

On April 19, 2004, the Board issued a "Request for Amicus Brief and Briefing Order" ("Briefing Order"), inviting the Agency's Office of General Counsel ("OGC") to answer a series of questions, to assist the Board's determination whether or not to review the permit decision. In the Briefing Order, the Board provided that RPU, MPCA, and Petitioner may, as appropriate, file responses to OGC's amicus brief. OGC, as well as Petitioner, MPCA, and RPU, have filed briefs in response to the Board's Briefing Order. Brief of Amicus OGC (June 2, 2004) (hereinafter, "OGC Brief"); MCEA's Response to OGC Brief (June 11, 2004); MPCA's Response to OGC Brief (June 17, 2004); Response of RPU to OGC Brief (June 18, 2004).

### III. DISCUSSION

#### A. Standard of Review

Under the regulations governing petitions for review, the Board does not ordinarily review a permit decision unless the decision is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a); *accord, e.g., In re Kendall New Century Dev.*, 11 E.A.D. 40, 46 (EAB 2003); *In re Zion Energy, L.L.C.*, 9 E.A.D. 701, 705 (EAB 2001). The Board is guided by language in the preamble to 40 C.F.R. § 124.19 that states the “power of review should be only sparingly exercised” and “most permit conditions should be finally determined at the Regional [or State] level.” *In re Hillman Power Co.*, 10 E.A.D. 673, 680 (EAB 2002) (quoting 45 Fed. Reg. 33,290, 33,412 (May 19, 1980)); *Zion Energy*, 9 E.A.D. at 705 (same). Petitioner carries the burden of demonstrating that review is warranted. *Kendall New Century*, 11 E.A.D. at 46; *Hillman Power*, 10 E.A.D. at 680; *In re Masonite Corp.*, 5 E.A.D. 551, 557 (EAB 1994); see 40 C.F.R. § 124.19(a). Moreover, “It is not our duty in an adversarial proceeding to comb the record and make a party’s argument for it.” *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 507 n.39 (EAB 2002); *accord In re Louisiana-Pacific Corp.*, 2 E.A.D. 800, 802 (CJO 1989) (“The reviewing official is not required to engage in a search of the entire record to determine what, if anything, supports Respondent’s objections; it would be improper for the reviewing official to do so, for Respondent would have its argument constructed for it.”).

#### B. Petitioner’s Argument That an EUSGU Emissions Unit Includes More Than Just Boilers, Under a Plain Text Reading of the Definitions; MPCA’s Response

Pre-construction review is required for any new major stationary source or any major modification to a major stationary source in an area subject to the PSD requirements of the Clean Air Act. Pre-construction review entails several analyses, including an air quality analysis, a BACT analysis,<sup>6</sup> and an analysis to assure

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<sup>6</sup> BACT is defined in the regulations as:

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 \* \* \* .

40 C.F.R. § 52.21(b)(12) (2003); see also CAA § 169(3), 42 U.S.C. § 7479(3) (statutory definition of BACT).

that emissions increases at the facility do not exceed a PSD area's increment (i.e., the overall cap on emissions in an area subject to the PSD program).<sup>7</sup> CAA § 165, 42 U.S.C. § 7475. As for BACT, the regulations state, "A new major stationary source shall apply best available control technology for each [regulated pollutant] that it would have the potential to emit in significant amounts." 40 C.F.R. § 52.21(j)(2). Where there is a major modification to an existing source, the regulations provide: "A major modification shall apply best available control technology for each [regulated pollutant] for which it would result in a significant net emissions increase at the source." *Id.* § 52.21(j)(3). For such major modification, "This [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 in the unit." *Id.* (emphasis added).

As for what an emissions unit is, the definition of "emissions unit" prior to the New PSD Rules (found at 40 C.F.R. § 52.21(b)(7) (1981-2002)), read as follows:

"Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Act.

As a result of changes made by the New PSD Rules, the definition of "emissions unit" (found at 40 C.F.R. § 52.21(b)(7) (2003)), which became effective on March 3, 2003, adds a reference to an electric utility steam generating unit ("EUSGU"), but is otherwise substantively unchanged for purposes of our analysis. The text of the new definition reads:

Emissions unit means any part of a stationary source that emits or would have the potential to emit any [regulated pollutant] and includes an *electric utility steam generating unit* as defined in paragraph (b)(31) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) and this section:

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<sup>7</sup> Overall emissions of a particular pollutant in a PSD area cannot exceed either the NAAQS or the "increment" for the area, with an "increment" being an allowable increase in emissions above a baseline level of emissions (i.e., a historical level of emissions). CAA §§ 161, 163, 165, 42 U.S.C. §§ 7471, 7473, 7475. The size of the increment (i.e., the size of allowable emissions increase above the baseline) varies depending on whether the area has been designated as a sensitive area such as certain parks and wilderness areas (i.e., "Class I" areas). CAA §§ 162-163, 42 U.S.C. §§ 7472-7473. Collectively, the NAAQS and the increment form a cap on a PSD area's overall allowable emissions. For purposes of simplicity, this decision uses the term "increment" to mean the cap on emissions formed by both the NAAQS and the increment in a PSD area.



(i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

(ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(7)(i) of this section.

40 C.F.R. § 52.21(b)(7) (2003) (emphasis added).<sup>8</sup> Both the old and new version of the PSD regulations define EUSGU as:

any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW [megawatts] electrical output to any utility power distribution system for sale.

40 C.F.R. § 52.21(b)(31) (1993-2003).<sup>9</sup> Thus, for our purposes, the definition of “emissions unit” has changed, principally, by adding the term EUSGU to the definition of “emissions unit.”

This recent, express incorporation of EUSGU into the term “emissions unit” defines the focus of the Petition for Review. Petitioner’s contention is that the new, plain text definition of “emissions unit,” by virtue of adding the term EUSGU, necessarily includes the equipment needed to generate the electricity for an EUSGU. Petition for Review at 3, 10. Thus, Petitioner argues the new definition includes not only the boilers of an EUSGU-type emissions unit but also the connected steam lines, steam turbines, and generators.<sup>10</sup> *Id.* Petitioner reaches this conclusion by arguing that an EUSGU, according to the plain meaning of the words “steam electric generating unit,” must be able to generate electricity; a boiler, by itself, is not capable of producing electricity, and therefore, does not fit

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<sup>8</sup> An even more recent alteration to this definition adds the following language to 40 C.F.R. § 52.21(b)(7)(ii), but appears to have no bearing on the issue Petitioner raised in the Petition for Review: “A replacement unit, as defined in paragraph (b)(33) of this section, is an existing emissions unit.” Prevention of Significant Deterioration (PSD) and Non-Attainment New Source Review (NSR): Reconsideration, 68 Fed. Reg. 63,021, 63,029 (Nov. 7, 2003).

<sup>9</sup> The remainder of the definition of EUSGU reads, “Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.” 40 C.F.R. § 52.21(b)(31) (1993-2003).

<sup>10</sup> Petitioner presented this argument to MPCA in comments Petitioner made during the comment period. Petitioner’s Comments, *passim*. Neither MPCA nor RPU challenge Petitioner’s eligibility to petition for review based on these comments.

the definition of an EUSGU. *Id.* Petitioner submits that because a boiler needs other equipment — such as steam lines, a steam turbine, and a generator in order to produce electricity — a “steam electric generating unit” must include all these parts put together. *Id.* Under Petitioner’s interpretation, a modification to the steam lines, such as planned by RPU, would constitute a modification to an “emissions unit,” which includes an EUSGU; accordingly, such a modification would trigger the BACT requirement for RPU’s proposed project. *Id.* at 10-16. Petitioner therefore requests the Board to review and reverse MPCA’s decision not to require BACT. *Id.* at 17.

MPCA’s final decision to issue the permit found that RPU’s proposed construction of the high-pressure steam line would not be a modification to an “emissions unit,” and thus would not require BACT. MPCA Order ¶¶ 17-18. MPCA determined that an emissions unit must be a unit that emits or has the potential to emit a regulated pollutant, and that the recent inclusion of EUSGU into the definition of “emissions unit” did not change the underlying meaning of “emissions unit.” *Id.* ¶ 18(b)-(c). MPCA reasoned that, based on definitions of EUSGU in other air quality programs, an EUSGU is essentially a combustion device; that combustion devices emit or have potential to emit regulated pollutants and therefore are emissions units. *Id.* ¶ 18(d). MPCA concluded that equipment, such as steam turbines or steam lines, although often associated with emissions units, are not emissions units because they do not emit or have potential to emit regulated pollutants. *Id.* ¶ 18(e).

### C. *The Narrow Confines of Petitioner’s Arguments*

The PSD permit before us does not require installation of BACT controls or specify BACT limits. Given the centrality of BACT to the PSD program, *e.g.*, *In re Hillman Power Co.*, 10 E.A.D. 673, 677 (EAB 2002) (describing BACT as a “core” requirement of the PSD program); *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 247 (EAB 1999) (same); *see* CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4), we do not regard this absence as inconsequential. This being said, the particular issue presented by the Petition for Review is quite narrow: whether the plain text of the new regulatory definition of “emissions unit” mandates that an EUSGU-type emissions unit includes more than just the boilers, but also includes the steam pipes and other ancillary equipment needed to produce electricity. Petition for Review at 3, 10. Petitioner did not claim, in either its comments below or in the Petition for Review, that the pre-existing definition of “emissions unit” would require BACT for RPU’s project. In fact, Petitioner’s Comments on the permit state, “Prior to the rule change made final at the close of 2002, the term ‘emissions unit’ may have been arguably limited to RPU’s fossil-fueled boilers.” Petitioner’s Comments at 4. Elsewhere in both its comments and its Petition for Review, Petitioner makes no argument to the contrary, and rather prefers to confine its focus to the impact of the PSD rule change. *See, e.g.*, Petition for Review at 9.

Petitioner further curtailed its arguments by only maintaining that there was a *physical* modification, to the steam pipes at the facility, and makes no argument as to whether there would be a change in the method of operation (i.e., “operational modification”) at the facility due to the project.<sup>11</sup> *E.g.*, Petition for Review at 6, 8-9; Petitioner’s Comments at 2-3, 5. Accordingly, we decide this matter based on the narrow issue Petitioner actually presented in the Petition for Review, without addressing any other possible issues associated with the issuance of PSD permits without BACT limits.

#### D. Analysis of Petitioner’s Argument

When construing an administrative regulation, the normal tenets of statutory construction generally apply. *In re Consumers Scrap Recycling, Inc.*, 11 E.A.D. 269, 293-95 (EAB 2004) (citing *Black & Decker Corp. v. Comm’r*, 986 F.2d 60, 65 (4th Cir. 1993)); *accord In re Bil-Dry Corp.*, 9 E.A.D. 575, 595 (EAB 2001). The plain meaning of words is ordinarily the guide to the definition of a regulatory term. *Consumers Scrap Recycling*, 11 E.A.D. at 292 (citing *T.S. v. Bd. of Educ.*, 10 F.3d 87, 89 (2nd Cir. 1993)). If the term’s language is clear and unambiguous, the Board generally follows the unambiguous intent expressed by the language. *See, e.g., id.*, 11 E.A.D. at 292-93. However, language is ambiguous if it is “capable of being understood in two or more possible senses or ways.” *In re U.S. Army, Fort Wainwright Cent. Heating & Power Plant*, 11 E.A.D. 126, 141 (EAB 2003) (quoting *Chickasaw Nation v. United States*, 534 U.S. 84, 90 (2001)). Furthermore, “The meaning — or ambiguity — of certain words or phrases may only become evident when placed in context.” *Id.* (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132 (2000)); *accord Whitman v. Amer. Trucking Ass’n*, 531 U.S. 457, 466 (2001) (“Words that can have more than one meaning are given content, however, by their surroundings \* \* \*”); *see, e.g., Consumers Scrap Recycling*, 11 E.A.D. at 293-95. Regulatory interpretation cannot be made in a vacuum, with no sense of context. *See In re Brown Wood Preserving Co.*, 2 E.A.D. 783, 790 (CJO 1989). “Words are not pebbles in alien juxtaposition; they have only a communal existence; and not only does the meaning of each interpenetrate the other, but all in their aggregate take their purport from the setting in which they are used \* \* \*.” *Id.* n.18 (quoting *Shell Oil Co. v. Iowa Dep’t of Revenue*, 488 U.S. 19, 25 n.6 (1988), quoting Judge Learned Hand in *NLRB v. Federbush Co.*, 121 F.2d 954, 957 (2d Cir. 1941)).

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<sup>11</sup> Furthermore, Petitioner submits that only Unit 4 is subject to the BACT requirement, because, among the four “units” in question, only Unit 4 is capable of supplying more than 25 megawatts of electricity. Petition for Review at 7; Petitioner’s Comments at 3-5; *see also* 40 C.F.R. § 52.21(b)(31) (defining EUSGU as a steam electric generating unit, constructed to supply more than one-third of its potential output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale).

Although Petitioner presents a possible interpretation of an EUSGU emissions unit, it is by no means the only way to read the text of the regulation. The definition of EUSGU also explains the purpose of an EUSGU: “*electric utility steam generating unit* means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW [megawatts] electrical output to any utility power distribution system for sale.” 40 C.F.R. § 52.21(b)(31) (2003); accord MPCA Staff Memorandum at 2. Nowhere does the regulatory definition dictate that an EUSGU emissions unit is to be viewed solely in terms of its structural components.<sup>12</sup> See 40 C.F.R. § 52.21(b)(31) (2003); see also *id.* § 52.21(b)(7). Reference to an EUSGU’s purpose is suggestive of a meaning that goes beyond a collection of parts. See *id.* § 52.21(b)(31). It is therefore permissible to look to the purpose of the amended regulation to determine its meaning and, ultimately, how it fits within the regulatory scheme.

#### E. *The Intended Purpose of the New Definition of “Emissions Unit”*

As discussed previously, the text of the new PSD regulations does not support Petitioner’s argument that the plain text of the term EUSGU means all the equipment needed in combination to produce electricity. Accordingly, in analyzing Petitioner’s submitted interpretation, we look to the context of the new PSD regulations. In making its recent amendment to the definition of “emissions unit,” EPA merely intended to re-consolidate the procedures for calculating future emissions for both EUSGU emissions units and non-EUSGU emissions units. See Preamble to New PSD Rules, 67 Fed. Reg. 80,186, 80,192 (Dec. 31, 2002). EPA did not intend to make a substantive change of the type suggested by Petitioner. See *id.*

In the history of calculating future emissions of modified EUSGUs, such as the EUSGUs at RPU’s facility, some of the pivotal events are the Seventh Circuit’s decision in *Wisconsin Electric Power Company v. Reilly*, 893 F.2d 901 (7th Cir. 1990) (or “WEPCO”), and the rule the Agency promulgated in response to the aforementioned case — the so-called “WEPCO Rule,” 57 Fed. Reg. 32,314 (July 21, 1992) — both of which are discussed further below. The following table

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<sup>12</sup> Petitioner cites to *Shalala v. Saint Paul-Ramsey Medical Center*, 50 F.3d 522, 528-29 (8th Cir. 1995), for the principle that, in interpreting a regulation, an agency cannot support an interpretation contrary to its plain text meaning by implying language not existing within the text of the regulation. Petition for Review at 14. That case struck down an agency’s attempt to read an additional, unwritten requirement into the regulations, which would have imposed extra burdens on regulated parties. *Saint Paul-Ramsey*, 50 F.3d at 528-29. As we have concluded, however, in the present case, the plain text of the regulations at issue does not clearly command Petitioner’s interpretation and, as discussed further, the context behind the new PSD regulations, likewise, does not support the issue presented for review.

chronicles the history of the various methodologies for calculating future emissions of modified units:

<b>Methodology of Calculating Future Emissions of Modified Units</b>	<b>Effective Dates</b>	<b>Applicable to:</b>
Actual-to-Potential (Potential to Emit)	until July 1, 1992 (i.e., before the <i>WEPCO</i> Rule)	both EUSGUs and non-EUSGUs
Actual-to-Potential (Potential to Emit)	July 1, 1992 ( <i>WEPCO</i> Rule) until March 3, 2003	non-EUSGUs <sup>13</sup>
Actual-to-Future-Actual	July 1, 1992 ( <i>WEPCO</i> Rule) until March 3, 2003	modified EUSGUs
Actual-to-Projected-Actual	March 3, 2003-current	both EUSGUs and non-EUSGUs <sup>14</sup>

Before promulgation of the *WEPCO* Rule in 1992, EPA originally calculated future emissions for modified EUSGU emissions units and for modified non-EUSGU emissions units based on the relatively stringent “actual-to-potential” methodology. Preamble to *WEPCO* Rule, 57 Fed. Reg. at 32,316-17; see, e.g., 40 C.F.R. § 52.21(b)(21) (1988). For modified emissions units, the actual-to-potential test, generally, calculated whether there would be an emissions increase by comparing past actual emissions, for a baseline, against the future “potential to emit.” Preamble to *WEPCO* Rule at 32,316-17; see, e.g., 40 C.F.R. § 52.21(b)(21)(iv) (1988); see also *In re Tenn. Valley Auth.*, 9 E.A.D. 357, 422-25, 432-33 (EAB 2000) (“*TVA*”), *appeal dismissed for lack of jurisdiction*, 336 F.3d 1236 (11th Cir. 2003), *cert. denied*, 124 S. Ct. 2096(2004). “Potential to emit” is defined as the “maximum capacity of a stationary source to emit a pollutant under its physical and operational design.” 40 C.F.R. § 52.21(b)(4) (defining “potential to emit”).

<sup>13</sup> Under the *WEPCO* Rule, promulgated in 1992, the actual-to-potential methodology applied to both non-EUSGUs and new or replaced EUSGUs, but did not apply to modified EUSGUs. 40 C.F.R. § 52.21(b)(21)(iv-v) (1993-2002). Future emissions from modified EUSGUs, under the *WEPCO* Rule, was governed by the more lenient actual-to-future-actual methodology, as discussed further. *Id.* § 52.21(b)(21)(v).

<sup>14</sup> However, under the New PSD Rules, effective March 3, 2003, the baseline for EUSGUs is calculated differently. See Preamble to New PSD Rules, 67 Fed. Reg. at 80,191, 80,194; 40 CFR § 52.21(b)(48) (2003).

The 1990 Clean Air Act Amendments<sup>15</sup> established Title IV — a new control scheme for addressing acid rain caused by utilities. *See* Preamble to *WEPCO* Rule, 57 Fed. Reg. at 32,315, 32,318. The enactment of Title IV prompted EUSGUs to undertake major pollution control projects, thus triggering the prospect of preconstruction review. *Id.* at 32,314-15.

In 1990, in *WEPCO*, the Seventh Circuit Court of Appeals found that the regulations in effect at that time did not support EPA's application of the actual-to-potential methodology to an EUSGU that was undergoing a like-kind replacement of parts. 893 F.2d at 917-18. In particular, the Seventh Circuit expressed concern that EPA's methodology unrealistically predicted a worst case scenario of pollutant emissions. *Id.*

In response, in 1992 EPA promulgated the *WEPCO* Rule, which provided the more lenient "actual-to-future-actual" methodology for calculating future emissions of modified EUSGUs, but retained the more stringent actual-to-potential methodology (calculating "potential to emit") for non-EUSGU emissions units.<sup>16</sup> Preamble to *WEPCO* Rule, 57 Fed. Reg. at 32,316-17; *see* 40 C.F.R. § 52.21(b)(21)(iv-v) (1993-2002).<sup>17</sup>

Under the actual-to-future-actual methodology, EPA estimates future emissions of EUSGUs based on the facts of each particular proposed construction pro-

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<sup>15</sup> Pub. L. No. 101-549, 104 Stat. 2399 (Nov. 15, 1990).

<sup>16</sup> As discussed, although the *WEPCO* Rule provided for the more lenient actual-to-future-actual methodology as to modified EUSGUs, it retained the more stringent actual-to-potential (potential to emit) methodology as to new or replaced EUSGUs. 40 C.F.R. § 52.21(b)(21)(iv-v) (1993-2002).

<sup>17</sup> 40 C.F.R. § 52.21(b)(21)(iv-v) (1993-2002):

(iv) For any emissions unit (other than an electric utility steam generating unit specified in paragraph (b)(21)(v) of this section) which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(v) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the source owner or operator maintains and submits to the reviewing authority, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the reviewing authority if it determines such a period to be more representative of normal source post-change operations.

ject, EPA's experience with electric utilities, and the similar nature of electric utilities. Preamble to *WEPCO* Rule, 57 Fed. Reg. at 32,317. Unlike potential-to-emit (under the actual-to-potential methodology), EPA's emissions predictions for modified EUSGUs, under the *WEPCO* Rule, do not look for the maximum capacity to emit. Compare 40 C.F.R. § 52.21(b)(21)(v) (1993-2002) (*WEPCO* Rule) and 40 C.F.R. § 52.21(b)(21)(iv) (1988).

Under the New PSD Rules, which are the focus of the present litigation, EPA adopted a single methodology — the “actual-to-projected-actual” applicability test<sup>18</sup> — for all modifications to existing emissions sources, including both EUSGUs and non-EUSGU emissions units, for calculating emissions increases.<sup>19</sup> Preamble to New PSD Rules, 67 Fed. Reg. at 80,191-93; see 40 C.F.R. § 52.21(a)(2)(iv)(C) (2003). In doing so, EPA noted, “Today’s action amends the existing [New Source Review] regulations to provide you with a common applicability test for all existing emissions units — the actual-to-projected-actual applicability test.” Preamble to New PSD Rules, 67 Fed. Reg. at 80,193. EPA explained, “We are \* \* \* revising the procedures for projecting future emissions for EUSGUs to conform with these new procedures and *consolidate the EUSGU and non-EUSGU procedures into a single set of provisions.*” *Id.* at 80,192 (emphasis added). This is a limited-purpose clarification of the previous rule, which had been in place both before and after *WEPCO*. EPA’s intent in incorporating the term EUSGU into the term “emissions unit” was to ensure that emissions from both types of units — EUSGU and non-EUSGU emissions units — are calculated in a similar fashion, by integrating those terms. Preamble to New PSD Rules, 67 Fed. Reg. at 80,192 (codified at 40 C.F.R. § 52.21(a)(2)(iv), (b)(7) (2003)). In doing so, EPA incorporated the definition of EUSGU within the definition of “emissions unit.” See 40 C.F.R. § 52.21(b)(7) (2003). There clearly was no intent by EPA to change the meaning of “emissions unit,” as suggested by Petitioner. By this alteration EPA actually intended to provide some relief for the regulated community: “By allowing you to use today’s new version of the actual-to-projected-actual applicability test to evaluate modified existing emissions units, *we expect that fewer projects will trigger the major [New Source Review] permitting requirements.*” Preamble to New PSD Rules, 67 Fed. Reg. at 80,192 (emphasis added).<sup>20</sup>

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<sup>18</sup> The “actual-to-projected-actual” test departs somewhat from the actual-to-potential test, previously required for non-EUSGU emissions units, but is similar to the test that previously applied just to EUSGUs. See Preamble to New PSD Rules, 67 Fed. Reg. at 80,196.

<sup>19</sup> As noted, a minor deviation is maintained, however, in that the baseline for an EUSGU emissions unit is calculated differently than for a non-EUSGU emissions unit. Preamble to New PSD Rules, 67 Fed. Reg. at 80,191, 80,194; 40 C.F.R. § 52.21(b)(48) (2003).

<sup>20</sup> As explained by OGC in its amicus brief, “The reference to EUSGUs in the definition of emissions unit \* \* \* was designed to clarify that EUSGUs could avail themselves of EPA applicabil-  
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In sum, the Preamble to the New PSD Rules does not exhibit any intent by EPA, in promulgating the new definition of “emissions unit,” to impose BACT on modifications to an EUSGU’s steam pipes. Instead, the Preamble to the New PSD Rules shows that EPA’s intent was that the new definition of “emissions unit” consolidate the methods of calculating future emissions from existing EUSGUs and non-EUSGU emissions units. Accordingly, we disagree with the argument Petitioner submitted in its Petition for Review.

#### IV. CONCLUSION

For the foregoing reasons, the Board hereby denies review of the Petition.<sup>21</sup> In accordance with 40 C.F.R. § 124.19(f)(2), the Regional Administrator of EPA Region V, or his delegatee, shall promptly publish a notice of this final agency action in the Federal Register.

So ordered.

#### *Supplemental Opinion of Judge McCallum:*

Notwithstanding the Board’s rejection of the Petition for Review, it is my opinion that serious problems exist with the notion that it is ever allowable, under the Clean Air Act (“CAA” or “Act”) and applicable regulations, for the Agency to issue or approve a Prevention of Significant Deterioration (“PSD”) permit that does not include an emissions limitation based on the statutory “best available control technology,” or BACT, requirement. Accordingly, appropriate steps should be taken by the Agency to clarify its position relative to approving permits without such a requirement — by rulemaking, if appropriate. My reasons follow.

This case involves a proposed major modification to an existing coal-fired steam electric generating facility owned by Rochester Public Utilities (“RPU”). RPU’s normal line of business as a public utility is selling electricity; however, plans are in place to add the sale of steam to RPU’s product line, the manufacture of which will substantially increase the facility’s pollutant emissions. The facility, as presently constituted, is comprised of four separate but interrelated electrical generating units, each one of which consists of a boiler, steam line, and steam driven electrical turbine. RPU will retain these units, but it plans to tap into one or

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ity reforms for ‘emission[s] units.’ In other words, the change was intended to clarify that references to ‘emissions units’ in EPA’s new ‘Clean Unit’ and ‘Plantwide Applicability Limit’ (‘PAL’) provisions included emission[s] units located at EUSGUs.” OGC Brief at 13-14 (citations omitted).

<sup>21</sup> Because the Board does not believe that oral argument would be of material assistance in resolving this matter, Petitioner’s request for oral argument is denied.



more of the existing steam lines that connect the boilers to the turbines. From there, a separate, dedicated new steam line will be constructed and routed to another facility, the Mayo Prospect Utility Plant (“Mayo Plant”), which is owned and operated by the Mayo Foundation and is unrelated to RPU. The Mayo Foundation will purchase the steam and use it to heat its own buildings and run its own separate electrical generating equipment.

The signal feature of the case is that the PSD permit, issued to RPU by the Minnesota Pollution Control Agency (“MPCA”) and approved by EPA Region V,<sup>22</sup> does not require RPU to apply BACT to control the increased emissions, even though other PSD requirements, such as increment consumption and analysis of air quality impacts, are factored into the terms and conditions of the permit. The absence of a BACT-based emissions limitation in the permit is an obvious cause for concern because, as a result of the proposed modification, there will be a significant net emissions increase at the RPU facility. Additional fuel (approximately 73,700 tons of coal per year) will be burned to create the additional steam needed by the Mayo Plant, as well as continuing to meet RPU’s own electrical generating requirements. This amount represents a significant increase over the 105,000 to 145,000 tons of coal per year normally consumed by the RPU facility.<sup>23</sup>

The proponents of this BACT-less PSD permit — which include RPU, MPCA, EPA Region V, and EPA’s Office of General Counsel (“OGC”)<sup>24</sup> — observe that under the regulations BACT is only required when a modification to the source involves a change to an “emissions unit.” *See, e.g.*, RPU’s Response to the Petition for Review at 4 (Sept. 2, 2003); MPCA’s Response to Petition for Review at 1 (Aug. 29, 2003); Brief of Amicus OGC at 11-13 (June 2, 2004) (“OGC Brief”). They argue that BACT is not required in this instance because only the steam lines are being physically changed, and the steam lines, by themselves, do not emit pollutants and, consequently, are not part of the emissions unit. To them, only the boilers form part of the “emissions unit.” The permit’s opponent, Minnesota Center for Environmental Advocacy (“MCEA” or “Petitioner”), on the other hand, appears to accept this argument as possibly having been legitimate at one time in the past, but argues that it has since lost any legitimacy as a result of a

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<sup>22</sup> The PSD permit was issued by MPCA as a delegatee of EPA Region V.

<sup>23</sup> The RPU plant is authorized to burn 350,000 tons of coal per year pursuant to a Title V permit. The plant however does not have an existing PSD permit because of its “grandfather” status (discussed in the text below). Thus, its emissions are not currently governed by a federal BACT limitation.

<sup>24</sup> With the exception of EPA Region V, these parties submitted briefs in response to the Board’s Briefing Order, dated April 19, 2004. OGC participated as amicus curiae pursuant to the Board’s request. EPA Region V had earlier approved issuance of the permit without a BACT requirement.

recent regulatory amendment. According to Petitioner, the amendment broadens the meaning of the term “emissions unit” to include other components of the facility such as the steam lines. For the reasons discussed below, it is my opinion that the term “emissions unit,” properly construed, has always encompassed the steam lines, i.e., both before and after the regulatory amendment; therefore, the amendment had no practical impact on the meaning of the term “emissions unit” for purposes of this case. Also, in my opinion, the proponents of the permit have misconstrued the applicable regulations, effectively reading them in a vacuum without regard to the statutory context. As explained below, there is an available, alternative reading of the regulations — one that is in harmony with the statute and fully consistent with the regulatory scheme — which should be preferred over the one being promoted by the proponents of the permit. My analysis follows.

To protect air quality from degradation in regions of the United States that are in attainment of the national ambient air quality standards (“NAAQS”), or are unclassifiable as either attainment or nonattainment, section 165 of the CAA, as amended, 42 U.S.C. § 7475, requires preconstruction review of all proposed new major emitting facilities before they are constructed or, if already in existence, before they undergo a major modification. Facilities subject to this requirement are required to obtain a permit, known as a “prevention of significant deterioration” permit, or PSD permit, before commencing construction.<sup>25</sup> CAA § 165(a)(1), 42 U.S.C. § 7475(a)(1). The permit must set forth emission limitations and other requirements that conform to the PSD program. In particular, section 165 of the Act forbids construction unless the proposed facility or modification “is subject to the best available control technology [BACT] for each [regulated] pollutant \* \* \* emitted from, or which results from, such facility.” CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); *see In re Knauf Fiber Glass*, 8 E.A.D. 121, 123-24 (EAB 1999) (“One of the most critical elements of the permit process is the selection of ‘best available control technology’ or ‘BACT’ for pollutants subject to PSD review.”); *see also Alaska Dep’t of Env’tl. Conservation v. EPA*, 124 S.Ct. 983, 999 (2004) (“The federal Act enumerates several ‘[p]reconstruction requirements’ for the PSD program. § 7475. Absent these, ‘[n]o major emitting facility \* \* \* may be constructed.’ *Ibid.* One express preconstruction requirement is inclusion of a BACT determination in a facility’s PSD permit.”). BACT is defined as an “emission limitation,” which, generally speaking, is based on the maximum degree of reduction of each pollutant subject to regulation after taking into account economic, energy, and environmental factors. CAA § 169(3), 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12). An air quality analysis is also part of the preconstruction review requirements; the primary purpose of the analysis is to determine whether a pro-

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<sup>25</sup> “Construction” is defined to include modifications, as defined in § 111(a)(4) of the Act. CAA § 169(2)(C), 42 U.S.C. § 7479(2)(C). Thus, both proposed new major emitting facilities and proposed modifications to existing facilities are subject to the preconstruction review requirements of § 165, 42 U.S.C. § 7475, of the Act.

posed project would cause or contribute to exceedances of NAAQS or PSD increments.<sup>26</sup>

When Congress enacted the Clean Air Act Amendments of 1970, it intended to “speed up, expand, and intensify the war against air pollution in the United States with a view to assuring that the air we breathe throughout the Nation is wholesome once again.” *Wis. Elec. Power Co.*, 893 F.2d 901, 909 (7th Cir. 1990) (quoting H.R. Rep. No. 91-1146, at 1 (1970), *reprinted in* 1970 U.S.C.C.A.N. 5356, 5356). At the same time, however, in 1977, Congress came to recognize that the easiest and most economical time to impose the requirements on major new sources of pollution was when a new facility was being proposed for construction. *See* H.R. Rep. No. 95-294, at 185 (1977), *reprinted in* 1977 U.S.C.C.A.N. 1077, 1264 (“Building control technology into new plants at time of construction will plainly be less costly than [sic] requiring retrofit when pollution ceilings are reached.”). To avoid the economic and practical disruptions associated with retrofitting *existing* major emitting facilities, Congress “grandfathered” these existing facilities, thereby freeing them from immediate compliance with the PSD program requirements, but only so long as the facilities were not modified in a way that increased emissions. *Ala. Power Co. v. Costle*, 636 F.2d 323, 350 (D.C. Cir. 1979) (“Congress also structured the [PSD] program to minimize disruption, by exempting existing sources from the permit requirement of section 165 until ‘modifications’ of those facilities increased emissions \* \* \* .”). This was done in recognition that existing facilities would eventually become worn out and would either have to be shut down or undergo major overhauls. *See In re Tenn. Valley Auth.*, 9 E.A.D. 357, 392 (EAB 2000), *appeal dismissed for lack of jurisdiction*, 336 F.3d 1236 (11th Cir. 2003), *cert. denied*, 124 S. Ct. 2096 (2004). Improvement in air quality would eventually be achieved, however, since the existing facilities would either have to comply with PSD requirements at the time of major modification or, if not modified, would someday have to shut down for economic and operational reasons. Nonetheless, other than being grandfathered, there is nothing of import in the text of the Clean Air Act or its legislative history to suggest that major modifications to existing facilities are subject to a less rigorous preconstruction review than new facilities:<sup>27</sup>

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<sup>26</sup> PSD increments are maximum allowable increases in pollutant concentrations permissible by regulation. *See* 40 C.F.R. § 52.21(c). The amount of the allowable increase depends upon the classification of the area affected by the emissions. *Id.*

<sup>27</sup> For major modifications, there is an express statutory exemption from one --but only one -- preconstruction requirement. In CAA § 165(a)(3), 42 U.S.C. § 7475(a)(3), new and modified facilities are required to demonstrate that construction or operation of the facility will not, *inter alia*, exceed applicable air quality and increments standards. The exemption from this preconstruction requirement appears in § 165(b) of the CAA, 42 U.S.C. § 7475(b), but is confined to major modifications in class II areas whose emissions will be less than fifty tons per year. This narrow exemption is not relevant to this case, except to illustrate that Congress knew how to provide an exemption from the Act’s preconstruction requirement.

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Implementation of the statute's definition of "modification" will undoubtedly prove inconvenient and costly to affected industries; but the clear language of the statute unavoidably imposes these costs except for de minimis increases. The statutory scheme intends to "grandfather" existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program. If these plants increase pollution, they will generally need a permit.

*Ala. Power*, 636 F.2d at 400. Indeed, if preconstruction review for major modifications were less rigorous than for new facilities, there would be little incentive to construct new facilities or replace existing ones, for existing facilities could then be modified without undergoing a full-fledged preconstruction review.

EPA has implemented the Congressional mandates for preconstruction review with extensive regulations, which, although modified from time to time, remain faithful to the statutory requirements described above. A key regulation, pertinent to the case under consideration, is section 52.21(j), which lays out the "control technology review" portion of the PSD program; it fleshes out the statutory mandate for setting emission limitations — in particular, BACT. 40 C.F.R. § 52.21(j). It is here where the views of the various parties and interests in this case begin to diverge.

As one would expect, given the ease with which a BACT limitation can be factored into the design and construction of a new major emitting facility, section 52.21(j) requires new major emitting facilities to apply BACT:

A new major stationary source shall apply best available control technology for each regulated NSR [new source review] pollutant that it would have the potential to emit in significant amounts.

40 C.F.R. § 52.21(j)(2). Because Congress also sought to ensure that BACT would be applied when an existing major emitting facility is modified, section 52.21(j) also addresses, in paragraph (3) thereof, the BACT requirement for major modifications. It is this paragraph that is most in contention:

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struction requirements for major modifications when it perceived a need for an exemption. Otherwise, Congress treated new and existing facilities equally once the preconstruction requirements become applicable.

A major modification shall apply best available control technology for each regulated NSR pollutant 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.

40 C.F.R. § 52.21(j)(3).

The plain language of the first sentence in paragraph (3), above, requires application of BACT to a major modification in conformity with the unambiguous language of the statute, which — it will be recalled — forbids construction of new or modified major emitting sources unless the “proposed facility is subject to the best available control technology \* \* \* .” CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4). No exceptions to this requirement appear in the first sentence of the regulation, just as none appear in the statute. The first sentence clearly applies to RPU’s proposed facility, since all elements of the regulation are satisfied; moreover, it is undisputed by the parties, including RPU, that the planned modification is a “major modification”<sup>28</sup> that will result in a “significant net emissions increase”<sup>29</sup> at the “source.”<sup>30</sup> In other words, the planned modification is subject to

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<sup>28</sup> With certain exceptions enumerated in the regulations (e.g., for “routine maintenance, repair and replacement” or an “increase in the hours of operation or in the production rate”), a “major modification” to a major stationary source encompasses “any physical change” in or “change in the method of operation” of a major stationary source that “would result in: a significant emissions increase \* \* \* of a regulated NSR pollutant \* \* \* ; and a significant net emissions increase of that pollutant from the major stationary source.” 40 C.F.R. § 52.21(b)(2).

<sup>29</sup> The terms “net emissions increase,” “significant” and “significant emissions increase” are defined separately in the regulations at subsections 52.21(b)(3), (b)(23), and (b)(40), respectively. The chief differences, as they appear to relate to this case, are that a “net emissions increase,” by itself, simply involves a determination of the size of the increase, 40 C.F.R. § 52.21(b)(3), whereas a “significant” net emissions increase refers to a net emissions increase that meets certain regulatory thresholds, *id.* § 52.21(b)(23), (40). For example, a net emissions increase of 40 tons per year of sulfur dioxide emissions is significant and will subject the source to regulatory controls. *Id.* § 52.21(b)(23)(i). A net emissions increase below that amount is not significant and does not, by itself, trigger PSD regulatory controls.

<sup>30</sup> The term “stationary source” is defined very broadly as “any building, structure, facility, or installation which emits or may emit [a regulated pollutant].” 40 C.F.R. § 52.21(b)(5).

A “building, structure, facility, or installation” is, in turn, defined as:

[a]ll of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) \* \* \* .

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the preconstruction review requirements of the Clean Air Act.

Notwithstanding the unambiguous mandate of the statute, as well as the added contextual framework provided by the first sentence of section 52.21(j)(3), the proponents of the permit contend that an exception to the BACT requirement can be found in the second sentence.<sup>31</sup> They reason that even though the major modification will result in a significant net emissions increase at the source, no emissions limitation based on BACT applies in this case, because, they claim, the term “emissions unit” only refers to the boiler, i.e., the combustion component of the facility,<sup>32</sup> and it was not physically changed (nor did it otherwise undergo a change in the method of operation of the unit).<sup>33</sup> In other words, they seek to

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*Id.* § 52.21(b)(6).

<sup>31</sup> Had the second sentence of § 52.21(j)(3) been created with the intention of providing an exception from the BACT requirement, as argued by the proponents of the permit, it easily could have been written to accomplish that objective with clarity, but it was not. In addition, if such an exception flows naturally from this language, as the proponents of the permit would have us believe, the regulatory history of § 52.21(j)(3) would no doubt have been replete with extensive comments and responses thereto. But none have been brought to our attention, which, in itself, is highly indicative of the lack of merit to the arguments advanced by the proponents of the permit.

<sup>32</sup> The definition of “emissions unit”, which became effective as of March 3, 2003, reads, in relevant part, as follows:

*Emissions unit* means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(31) of this section.

40 C.F.R. § 52.21(b)(7) (2003). A literal reading of “any part of a stationary source that emits \* \* \* any regulated NSR pollutant” might lead one to the not illogical belief that a steam line, unlike a boiler, does not emit pollutants, and, therefore, is not part of the emissions unit. However, as explained elsewhere in this supplemental opinion, such a reading inevitably leads to an unacceptable result, which is contrary to the statute, namely, that BACT would not apply, even though the major modification to the source results in a significant net increase in emissions of regulated pollutants. Thus, it makes more sense to read the term “emissions unit” broadly, to encompass the entire electrical generating unit (boiler, steam line, and turbine-generator), not just the boiler. Moreover, a literal reading of the term, without regard to the statutory language, might also lead to an even narrower reading than suggested by the proponents of the permit — one in which not even the boiler is considered an emissions unit. This would follow from the fact that the point at which pollutants are usually emitted is a smokestack, which presumably is a separate part connected to the boiler. Thus, only the smokestack would constitute an emissions unit under that interpretation. *Cf. United States v. Mead Corp.*, 533 U.S. 218, 247 (2001) (Scalia, J., dissenting: “As *Chevron* itself held, the Environmental Protection Agency can interpret “stationary source” to mean a single smokestack, can later replace that interpretation with the “bubble concept” embracing an entire plant, and if that proves undesirable can return again to the original interpretation.”).

<sup>33</sup> Given that RPU will be engaging in a new business activity — production of steam for resale, and will be substantially increasing its coal consumption to produce the steam — a reasonably  
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create, in effect, a blanket exemption for all major modifications in which the boiler is not physically altered. This reasoning is flawed and does not justify creation of an exception where none is otherwise indicated by the plain language of the statute and regulations. *See Ala. Power*, 636 F.2d at 357 (categorical exemptions are not favored). It fails to recognize the function of the second sentence (discussed below), and it contravenes the unambiguous mandate of the first sentence, i.e., “[a] major modification shall apply best available control technology for each regulated NSR pollutant for which it would result in a significant net emissions increase at the source.” It fragments the PSD program by completely eliminating an essential component — BACT — the program’s technology component.

Congress was indeed concerned, as has been suggested,<sup>34</sup> that imposition of the PSD requirements should be applied when it is “efficient” to do so, i.e., when a new facility is being constructed or when an existing source undergoes a major modification. *E.g.*, H.R. Rep. No. 95-294, at 185 (1977), *reprinted in 1977 U.S.C.C.A.N.* at 1264 (“Building control technology into new plants at time of construction will plainly be less costly then [sic] requiring retrofit when pollution ceilings are reached.”). However, there is no expression of legislative intent to support the notion, advanced here,<sup>35</sup> that a major modification to a facility -- in this case, a modification that leaves the boiler untouched — is exempt from the BACT requirement. Indeed, in the Agency’s *Sunflower Applicability Determination*,<sup>36</sup> involving replacement of an old turbine with a new and improved turbine, without any concomitant physical change to the boiler, EPA intimated exactly the opposite: BACT might indeed be required, assuming the boiler’s capacity to produce increased energy was freed up as a result of the turbine modification.<sup>37</sup> This

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strong argument can be made that there will be a change in the method of operating the “emissions unit.”

<sup>34</sup> OGC Brief at 14.

<sup>35</sup> *Id.*

<sup>36</sup> OGC Brief, Ex. 2 (Letter from Donald C. Toensing, Chief, Air Permitting and Compliance Branch, EPA Region V, to Wayne Penrod, Senior Manager, Environment, Sunflower Electric Power Corp. (Aug. 28, 1998)) (hereinafter, “*Sunflower Applicability Determination*”).

<sup>37</sup> In that case, the resulting increased emissions would be looked upon as an operational change, and, presumably, require application of BACT to the boiler emissions.

The boiler might also not be subject to the BACT requirement if it has not \* \* \* undergone an operational change. \* \* \* A statement in your 7/30/98 letter [however] indicates that the boiler may now be able to operate over a greater operating capacity \* \* \* as a result of the turbine  
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single example casts doubt on the notion that the Agency is inexorably bound to the proposition that BACT is only required when there is a physical change to the combustion unit, i.e., the boiler.<sup>38</sup> Moreover, it makes sense in such circumstances to require the facility to invest in pollution control equipment, for even though the boiler itself will not be physically changed as a result of the modification, the change to the turbine would result in increased emissions and would require a capital expenditure.<sup>39</sup> It is surely a mockery of the legislative intent to declare that, as long as the boiler is not touched, a grandfathered facility can go on making capital expenditures indefinitely, without restraint, to pay for pollution-spawning major modifications to the facility, but dodge all responsibility for investing in modern pollution control measures.

What purpose then does the second sentence in section 52.21(j)(3) serve? The answer lies in recognizing, first and foremost, that it must be read in harmony with the first sentence. In other words, a BACT determination must be made whenever there is a major modification resulting in a significant net emissions increase at the source.<sup>40</sup> The second sentence thus serves to identify which units, if any, are subject to a BACT determination: it distinguishes between the emissions units that must apply BACT and those that remain grandfathered. For example, at a source with multiple emissions units, such as the four coal-fired electric steam generating units at RPU's facility, not all units will necessarily contribute

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upgrade. If such is the case, we might have difficulty with a position that the boiler has not experienced an operational change.

*Sunflower Applicability Determination* at 2. The Agency refers to the freeing-up process as "debotlenecking." OGC Brief at 5 n.2.

<sup>38</sup> A small handful of Agency applicability determinations, including *Sunflower*, contain statements indicating that BACT does not apply if the physical change occurs to some component other than the combustion unit. See OGC Brief, Exs. 1-4, 6-7. However, these statements are entirely conclusory, do not reveal any reasoned analysis of the statute and applicable regulations or the purposes thereof, and, for the most part, are dicta. Therefore, they are not entitled to any deference. Notably, they do not have the binding effect of regulations.

<sup>39</sup> There is no basis in the record or other materials cited by the proponents of the permit for assuming that adding new pollution control equipment to an existing facility is inherently more cost efficient if undertaken when the boiler is being modified versus adding the equipment when some other part of the emissions unit (a turbine or steam line, for example) is being modified. It seems reasonable to assume that in some instances, depending on the nature of the modification and the pollution control equipment, efficiencies might be achieved, whereas in other instances, it would not matter. For this reason, the following unsupported assertion by OGC is considered apocryphal: "BACT is placed on the boiler when it is efficient to do so — that is, when the boiler itself is being modified and not simply when there is a physical change elsewhere at the EUSGU." OGC Brief at 14.

<sup>40</sup> For the definition of "source," see *supra* note 30.



to increased emissions as a result of the modification. Those that do not contribute to increased emissions need not undergo a BACT determination. But those that do, must apply BACT. As a result, in accordance with the second sentence, the BACT requirement only applies to the individual emissions units that experience a “net emissions increase” (which is in contrast to “significant net emissions increase” in the first sentence).<sup>41</sup> The second sentence requires each “emissions unit” to be evaluated individually to determine whether it will experience a “net emissions increase,” i.e., without regard to whether the increase is significant. If it is determined that a net emissions increase will result, the particular emissions unit loses its grandfather status and BACT must be applied to that unit. This result obtains even though the increase in emissions at the individual unit does not, by itself, represent a *significant* net emissions increase.<sup>42</sup> In this manner, all emissions units at a source that actually contribute to the significant net emissions increase are required to modernize by applying BACT, but any emissions units that do not contribute to the increase remain grandfathered.

In light of the purpose served by the second sentence, as well as the overall mandate of the first sentence, there is no justification for reading the term “emissions unit” narrowly so as to exclude RPU’s major modification from applying

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<sup>41</sup> For the differences between the terms “net emissions increase” and “significant net emissions increase,” see *supra* note 29.

<sup>42</sup> An exception may be available if an increase at one unit is offset, for example, by shutting down another unit. This point is addressed in the preamble to the final regulations adopting 40 C.F.R. § 52.21(j)(3), which states:

If a new unit were added or if a modification were made to a unit at a source, but there are contemporaneous decreases in emissions elsewhere at the source, BACT is required only for the pollutants for which there is a net significant plant-wide increase. For example, consider the addition of a boiler whose emissions of PM, SO<sub>2</sub>, and NO<sub>x</sub> each exceed *de minimis* levels. If, at the same time, an emission[s] unit of SO<sub>2</sub> elsewhere at the source were shut down, such that plant-wide emissions of SO<sub>2</sub> either do not increase or increase by less than a *de minimis* amount, BACT is required for the new boiler only for PM and NO<sub>x</sub>. Of course, BACT will not be required if there is no significant plant-wide increase in emissions of any pollutant. Similarly, if an existing emissions unit of a source were modified such that there is an emissions increase for one or more pollutants, but not all, BACT is required only for the pollutants for which there is both a net increase at the unit and a net significant plant-wide increase.

45 Fed. Reg. 52,676, 52,723 (Aug. 7, 1980).

BACT to its emissions. Steam lines are integral to the production of electricity at RPU's facility. To run the turbines that generate the electricity it sells, RPU must connect the boilers to the turbines by means of steam lines. Without the steam lines, there can be no production of electricity, much less production of steam for resale to the Mayo Plant. In this sense, the steam lines are no less important than the facility's boilers. Also, in terms of environmental impact, a physical change to the steam lines that results in substantially increased emissions is no less significant than a change to the boilers that results in the same increase in emissions. Consequently, as noted at the beginning of this supplemental opinion, it is my conclusion that the term "emissions unit" should be construed to encompass the steam lines at RPU's facility.<sup>43</sup> Also, because there is a dearth of reasoned legal analysis supporting the practice followed in this case,<sup>44</sup> it is my recommendation that the Agency conduct a rulemaking proceeding if it wishes to continue on the path that it is currently following.<sup>45</sup>

### *Supplemental Opinion of Judge Fulton:*

While I appreciate Judge McCallum's thoughtful review of the origins and objectives of the statutory and regulatory provisions pertaining to the application of BACT to major modifications at existing sources, I would not go so far as to suggest that the only plausible reading of the Act and the applicable regulations requires application of BACT controls in each and every circumstance in which a source has experienced a major modification within the meaning of the applicable requirements. In its amicus brief filed with this Board, OGC offers a contrary interpretation which, in my view, is neither indefensible nor incompatible with the text of both the statute and the regulations.

As noted, the regulation at issue here provides as follows:

A major modification shall apply best available control technology for each regulated NSR pollutant for which it would result in a significant net emissions increase at the

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<sup>43</sup> This construction of the term functions independently of the regulatory amendment cited by Petitioner; consequently, the amendment had no practical impact on the analysis of whether or not BACT should be applied to the RPU facility's proposed modification.

<sup>44</sup> See *supra* note 38.

<sup>45</sup> This is not to say that various concerns alluded to by the proponents of the permit, in particular, by OGC, have no validity under any circumstances. However, any perceived programmatic inconsistencies between, for example, the PSD program and similar requirements in other programs, such as the New Source Performance Standards or National Emission Standards for Hazardous Pollutants, or requirements emanating from the 2002 NSR Reform Rules, 67 Fed. Reg. 80,186 (Dec. 31, 2002), cannot be properly evaluated until they are fully explicated, which has not occurred in this case.

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.

40 C.F.R. § 52.21(j)(3).

According to its brief, OGC has interpreted this provision as follows:

[T]he first sentence requires that the permitting authority examine all emission units at the source and determine if, as a result of the modification, their emissions will increase or decrease. The total increase or decrease across the entire source is then calculated to determine if there is a “significant net emissions increase.” If a significant net emissions increase is projected to result from the modification, a proposed project is subject to PSD.

[T]he first sentence, however, does not answer which, if any, emissions units are required to install BACT. This is left to the second sentence.

The second sentence focuses on individual emissions units and sets forth two criteria that must be met before an emissions unit is required to install BACT. First, as the Board notes, there must be a net emissions increase at the emissions unit in question. Such an increase need not be “significant.” Second, the emissions unit itself must have been modified. This second requirement flows from the concluding phrase of the second sentence requiring that the emissions increase be “as a result of a physical change or change in method of operation in the unit.”

OGC Brief at 12-13 (citations and footnotes omitted). OGC represents that this interpretive view dates back to 1983 and has served as a predicate for a number of EPA permit decisions. *Id.* at 7-11.

Reduced to its essence, the interpretation advanced by OGC considers the first sentence as determining generally when BACT analysis is required in conjunction with a major modification, and the second as indicating how, on a unit-by-unit basis, BACT is to be applied. It may be true that this two step view of

section 52.21(j)(3) allows for the possibility of a null set in terms of actual installation of BACT controls where it is determined that, although a significant net increase in emissions is expected as a result of modifications at a source, no emissions units at the source have experienced either a “physical change or change in the method of operation.”<sup>46</sup> But this potential does not by itself call OGC’s interpretation into question. Rather, it strikes me that the interpretation, while perhaps not the only possible reading of the regulation, offers a rational way of reading the two sentences in section 52.21(j)(3) in sequential harmony.

Moreover, I do not see this reading as inherently incompatible with the statutory prohibition on construction of new or modified major emitting sources unless “[t]he proposed facility *is subject to* the best available control technology \* \* \*.” CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4) (emphasis added). Notably, the statutory text uses the phrase “is subject to” rather than “must apply” or some derivation thereof. To my way of thinking, this choice of phrasing should not be regarded as inconsequential. Rather, I read it as allowing room for EPA to determine through rulemaking how facilities that are generally subject to the BACT are to *apply* BACT. The question of how to apply BACT on a unit-by-unit basis is precisely what EPA has attempted to address through the promulgation and subsequent interpretation of 40 C.F.R. § 52.21(j)(3). I do not see the statutory text as foreclosing the path the Agency has chosen.

For the foregoing reasons, I am disinclined in the context of this case to call into question the Agency’s historical interpretation of 40 C.F.R. § 52.21(j)(3).

### ***Supplemental Opinion of Judge Stein:***

While I appreciate the considered views of Judge McCallum about the importance of the BACT analysis under the Clean Air Act program, especially in the context of upgrades of modified units, I see no compelling reason in this case to wade into such an complicated area of PSD law as it pertains to “emissions units.” While PSD permits in which there is a significant net emissions increase but which do not apply BACT should be carefully scrutinized,<sup>47</sup> I am not convinced

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<sup>46</sup> I would expect that this potential would only rarely become manifest, because facility modifications which serve to increase emissions will ordinarily include a “physical change or change in the method of operation” of the emitting unit itself. Accordingly, while I share Judge McCallum’s concern that the Act and its implementing regulations not be interpreted in a manner that frustrates air quality objectives, I would not expect this particular feature of regulatory system to contribute materially to such an outcome.

<sup>47</sup> There are a number of circumstances in which, as Judge Fulton notes, a facility may be subject to BACT but not apply BACT. This may include, for example, circumstances in which a facility undergoes a BACT analysis but the permitting authority determines BACT is “no control” as well as a circumstance in which the law does not require the unit undergoing change to apply BACT.

that the statute dictates a particular outcome here or that the applicable regulations can be interpreted in only one way. Thus, I leave for another day — for a case in which the issue is squarely presented and presumably one in which the administrative record is fully developed on this point — any further individual expression of my views on the questions on which my colleagues focus their supplemental opinions.