



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 05 2008

REPLY TO THE ATTENTION OF:

AE-17J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Warren L. Candy
Vice President, Generation Operations
Minnesota Power Company
Division of Allete, Inc.
30 West Superior Street
Duluth, Minnesota 55802-2093

RE: Notice and Finding of Violation issued to Allete Incorporated, d/b/a Minnesota Power Company

Dear Mr. Candy:

The U. S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Allete Inc., d/b/a Minnesota Power Company. This NOV/FOV is issued in accordance with Section 113(a) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a).

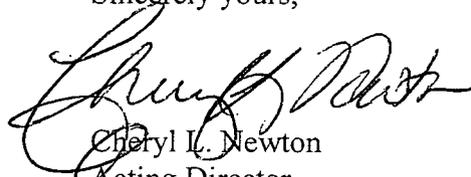
EPA has determined that Allete is violating the Prevention of Significant Deterioration requirements under Section 165 of the Act, 42 U.S.C. § 7475 and the Operating Permit requirements under Title V of the Act, 42 U.S.C. §§ 7661 – 7661e at its Boswell and Laskin Generating Stations located in Cohasset and Hoyt Lakes, Minnesota, respectively.

EPA is offering you an opportunity to confer with us about the violations cited in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violations, and the steps you will take to bring the facilities into compliance. Please plan for your technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Ethan Chatfield. You may call him at (312) 886-5112, to request a conference. You should make your request for a conference no later than 10

calendar days after you receive this letter, and we should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely yours,



Cheryl L. Newton
Acting Director
Air and Radiation Division

Enclosure

cc: Jeff T. Connell, Manager
Compliance and Enforcement Section
Industrial Division
Minnesota Pollution Control Agency

Court of Appeals for the D.C. Circuit explained in *Alabama Power v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979), “[t]he statutory scheme intends to ‘grandfather’ existing industries; but...this is not to constitute a perpetual immunity from all standards under the PSD program.” Rather, the Act requires grandfathered facilities to install modern pollution control devices whenever the unit is proposed to be modified in such a way that its emissions may increase.

2. The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the Act require preconstruction review and permitting for modifications of stationary sources. *See* 42 U.S.C. §§ 7470-7492. Pursuant to applicable regulations, if a major stationary source located in an attainment area is planning to make a major modification, then that source must obtain a PSD permit before beginning actual construction. *See* 40 C.F.R. § 52.21(i). To obtain this permit, the source must, among other things, undergo a technology review and apply BACT; perform a source impact analysis; perform an air quality analysis and modeling; submit appropriate information; and conduct additional impact analyses as required.

3. U.S. EPA incorporated the provisions of 40 C.F.R. § 52.21(b) through (w) into the Minnesota SIP, 45 *Fed. Reg.* 52741, and codified at 40 C.F.R. § 52.1234. U.S. EPA delegated to the Minnesota Pollution Control Agency (MPCA) the authority to review and process PSD permit applications, and to implement the federal PSD program. 46 *Fed. Reg.* 9580.

4. 40 C.F.R. § 52.21(i)(1) provides that “no stationary source or modification to which the requirements of paragraphs (j) through (r) of this section apply shall begin actual construction without a permit that states that the stationary source or modification would meet those requirements.”

5. 40 C.F.R. § 52.21(i)(2) provides that “the requirements of paragraphs (j) through (r) of this section apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Act”

6. The PSD regulations define “major modification” as “any physical change in or change in the method of operation of a major source that would result in a significant net emissions increase” of a regulated pollutant. 40 C.F.R. § 52.21(b)(2)(i).

New Source Performance Standards

7. Under Section 111 of the Act, 42 U.S.C. § 7411, the Administrator promulgated the New Source Performance Standards (NSPS) General Provisions, at 40 C.F.R. Part 60, Subpart A, and the “Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978,” codified at 40 C.F.R. Part 60, Subpart Da. Subpart Da applies to each electric utility steam generating unit capable of combusting more than 73 megawatts (250 million Btu per hour) heat input of fossil fuel (alone or in combination with any other fuel). 40 C.F.R. § 60.40a(a)(1).

8. 40 C.F.R. § 60.14(a) provides that “...any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act.

Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.”

Title V Requirements

9. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1) requires each State to develop and submit to U.S. EPA an operating permit program which meets the requirements of Title V. Pursuant to Appendix A of 40 C.F.R. Part 70, on December 4, 2001, U.S. EPA granted Minnesota final approval of its Title V Clean Air Act Permit Program, effective December 1, 2001. 66 *Fed. Reg.* 62967.

10. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any major source located in a state that has received whole or partial approval of its Title V program.

11. 40 C.F.R. § 70.5(a) requires the owner or operator of a Part 70 source to submit a timely and complete permit application.

12. 40 C.F.R. § 70.5(a)(2) defines “complete application” to include information that is “sufficient to evaluate the subject source and its application and to determine all applicable requirements.”

13. 40 C.F.R. § 70.1(b) requires the owner or operator of a Part 70 source to have a permit to operate that assures compliance by the source with all applicable requirements.

14. 40 C.F.R. § 70.7(b) provides, in part, that no Title V source may operate after the time that it is required to submit an application, except in compliance with its Title V permit.

B. FACTUAL BACKGROUND

15. Allete is incorporated in Minnesota.

16. Allete is a “person”, as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).

17. At all times relevant to this Notice, Allete has been and is the owner and/or operator of the Boswell and Laskin Electric Generating Stations located in Minnesota.

18. During all times relevant to this Notice, the Boswell and Laskin Generating Stations were located in areas classified as attainment PM (as total suspended particulates (TSP) and/or particles with an aerodynamic diameter less than or equal to a nominal 10 microns (PM₁₀)), sulfur dioxide (SO₂) and nitrogen oxide (NO_x).

19. The Boswell Energy Center is a fossil fuel-fired electric utility steam generating station located near Cohasset, Minnesota, in Township 55 North, Range 26 West (commonly known as Bass Brook Township), in Itasca County and has the potential to emit more than 100 tons per year each of NO_x, SO₂, and particulate matter (PM). The Station consists of the

following coal-fired boilers for electric generation with total generating capacity of 1029 megawatts net (MW_{net}), each of which has a heat input greater than 250 million BTU/hour: Boswell Unit 1 began operating in 1958; Unit 2 in 1960; Unit 3 in 1973; and Unit 4 in 1980.

20. The Boswell Station is a “fossil fuel-fired steam electric plant of more than 250 million British thermal units per hour.” Therefore, the Boswell Station constitutes a “major stationary source” within the meaning of 40 C.F.R. § 52.21(b)(1)(i)(a); and a “major emitting facility” within the meaning of Section 169(1) of the Act, 42 U.S.C. § 7479(1).

21. Between 1981 and 2001, various physical changes or changes in the method of operation were made at the Boswell Station. These changes include, but are not limited to, the following projects on Units 1 through 4:

Unit 1 1988 Project

- Replaced air heater
- Retubed condenser
- Replaced superheater
- Overhauled turbine/generator
- Improved flyash disposal system

The combined cost of this project was \$4,844,590.

Unit 2 1992 Project

- Replaced air heater

The cost of this project was \$1,943,722.

Unit 3 1981 Project

- Replaced economizer and boiler Coutant bottom

The cost of this project was \$4,306,600.

Unit 3 1994 Project

- Replaced burner corner panel tubes

The cost of this project was \$1,758,300.

Unit 4 1999 Project

- Replaced reheat surface tubes

The cost of this project was \$432,874.

Unit 4 2000 Project

- Overhauled turbine

22. On June 16, 1977, U.S. EPA Region 5 issued an Approval to Construct (permit no. EPA-5-77-A-6) for Boswell Unit 4. The permit granted approval to construct a “500 megawatt generating unit at its Clay-Boswell Generating Station.” From a period beginning in 2001 to at least 2005, Boswell Unit 4 net generation exceeded 500 megawatts.

23. On June 21, 1976, Minnesota Power submitted “Air Pollutant Emission Report”

forms as a supplement to its PSD application for Boswell Unit 4. These forms proposed the construction of a 500 megawatt net generation station with a maximum heat input capacity of 5,174 million British Thermal Units (mmBtu) per hour and a maximum coal consumption of 304.4 tons per hour. Further, in its Preliminary Determination issued with Permit EPA-5-77-A-6, U.S. EPA stated Minnesota Power proposes to construct a 500 MW unit with a maximum continuous heat input of 5,112 mmBtu per hour. Beginning in 2001, Boswell Unit 4 operated at maximum heat input of greater than 5,600 mmBtu per hour (on a monthly average basis) and a maximum coal input of greater than 310 tons per hour (on a monthly average basis). Based on these monthly average heat and coal input values, peak hourly heat input (mmBtu per hour) and peak hourly coal consumption (tons per hour) are at a level even greater than these indicated monthly averages.

24. The Laskin Energy Center is a fossil fuel-fired electric utility steam generating plant located near Hoyt Lakes, Minnesota, in Township 58 North, Range 14 West (commonly known as Hoyt Lakes Township), in St. Louis County; and has the potential to emit more than 100 tons per year each of NO_x, SO₂, and PM. The Station consists of the following coal-fired boilers for electric generation, each of which has a heat input greater than 250 million BTU/hour and a total generating capacity of 110 MW_{net}: Laskin Unit 1 began operating in 1953 and Unit 2 in 1958.

25. The Laskin Station is a “fossil fuel-fired steam electric plant of more than 250 million British thermal units per hour.” Therefore, the Laskin Station constitutes a “major stationary source” within the meaning of 40 C.F.R. § 52.21(b)(1)(i)(a); and a “major emitting facility” within the meaning of Section 169(1) of the Act, 42 U.S.C. § 7479(1).

26. In approximately 1997, various physical changes or changes in the method of operation were made at the Laskin Station. These changes include, but are not limited to, the following project on Unit 2:

1997 Unit 2 Project

– Replaced economizer

The cost of this project was \$382,790.

C. NOTICE AND FINDING OF VIOLATIONS

Violations of the Prevention of Significant Deterioration Provisions

27. The projects identified in paragraphs 21 and 26, above, each caused a significant net emissions increase, as defined at 40 C.F.R. §§ 52.21(b)(3)(i) and (b)(23)(i), of SO₂, NO_x and/or PM.

28. The projects identified in paragraphs 21 and 26, above, each constituted a “major modification,” as that term is defined at 40 C.F.R. § 52.21(b)(2)(i).

29. For the modifications listed in paragraphs 21 and 26, above, Allete failed to obtain a PSD permit as required by 40 C.F.R. § 52.21(i)(1).

30. None of the modifications listed in paragraphs 21 and 26, above, fall within the exemptions to the definition of “major modification” found at 40 C.F.R. §52.21(b)(2)(iii).

31. Allete violated and continues to violate Section 165(a) of the Act, 42 U.S.C. § 7475(a), and 40 C.F.R. § 52.21(i)(1) by constructing major modifications to existing major sources at the above-listed facilities without applying for or obtaining PSD permits and operating the modified facilities without installing the best available control technology or going through PSD review, and installing appropriate emission control equipment in accordance with a BACT analysis.

32. Each of the violations exists from the date of the start of construction of each modification and continues until the appropriate PSD permit is obtained and the necessary pollution control equipment is installed and operated.

33. Allete violated and continues to violate its Approval to Construct Permit no. EPA-5-77-A-6 by exceeding the Boswell Unit 4 heat input, coal input, and net generating capacity limitations stated in the permit and permit application.

Violations of the Standards of Performance for Electric Utility Steam Generating Units

34. Allete made a “physical or operational change” as defined by 40 C.F.R. 60.14 at Boswell Unit 4 that resulted in an increase in net generating capability from a maximum boiler design rate of 500 MW to at least 550 MW and an increase in heat input from 5,112 mmBtu per hour to at least 5,600 mmBtu per hour, resulting in hourly emission increases of PM, SO₂, and NO_x.

Violations of the Title V Provisions

35. Each of the two facilities identified, above, is a “major source” as defined by Section 501(2) of the Act, 42 U.S.C. § 7661(2) and 40 C.F.R. § 70.2.

36. Respondent’s Title V permit applications for the two facilities identified above failed to include the citation and description of all applicable requirements and other specific information that may be necessary to implement and enforce applicable requirements of the Act or to determine the applicability of such requirements, including, but not limited to, the requirement to apply/install BACT for SO₂, NO_x and/or PM for each of the units for which a project is described in paragraphs 21 and 26 above, as required by 40 C.F.R. § 70.5(c).

37. Allete violated and continues to violate 40 C.F.R. § 70.5 by failing to supplement or correct the Title V permit applications for the two facilities. *See* 40 C.F.R. § 70.5(b).

38. Allete exceeded the Boswell Unit 4 heat input, coal input, and net generating capacity PSD limitations in its Title V permit in violation of 40 C.F.R. § 70.7(b).

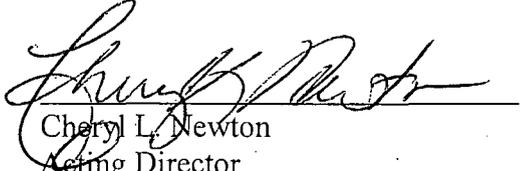
D. ENFORCEMENT

Section 113(a) (1) of the Act, 42 U.S.C. § 7413(a)(1), provides that at any time after the expiration of 30 days following the date of the issuance of a Notice of Violation, the Administrator may, without regard to the period of violation, issue an order requiring compliance with the requirements of the state implementation plan or permit, issue an administrative penalty order pursuant to Section 113(d), or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), provides in part that if the Administrator finds that a person has violated, or is in violation of any requirement or prohibition of any rule...promulgated...under...[Title I or Title V of the Act], the Administrator may issue an administrative penalty order under Section 113(d), issue an order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

E. EFFECTIVE DATE

Dated: 8/5/08


Cheryl L. Newton
Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

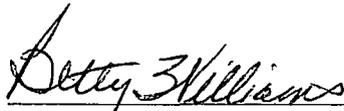
I, Betty Williams, certify that I sent a Notice of Violation and Finding of Violation, No. **EPA-5-08-MN-26**, by Certified Mail, Return Receipt Requested, to:

Warren L. Candy
Vice President, Generation Operations
Minnesota Power Company
Division of Allete, Inc.
30 West Superior Street
Duluth, Minnesota 55802-2093

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

Jeff T. Connell, Manager
Compliance and Enforcement Section
Industrial Division
Minnesota Pollution Control Agency

On the 6th day of August, 2008



Betty Williams
Administrative Program Assistant
AECAS IL/IN

CERTIFIED MAIL RECEIPT NUMBER: 70010320000601861177