

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

JAN 2 3 2012

REPLY TO THE ATTENTION OF:

# <u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Samuel A. Smalley Assistant Director – Wastewater Operations Detroit Water and Sewerage Department 735 Randolph Street Detroit, Michigan 48226

Re: Notice of Violation

Detroit Wastewater Treatment Plant

Dear Mr. Smalley:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to the City of Detroit, in accordance with Section 113(a) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a).

EPA has determined that the City is violating the Prevention of Significant Deterioration requirements under Section 165 of the Act, 42 U.S.C. § 7475, and the applicable implementing regulations of the Michigan State Implementation Plan at the Detroit Wastewater Treatment Plant (DWTP) in Detroit, Michigan. The NOV cites violations of these provisions based on certain physical changes made by and/or planning to be made by the City at DWTP's fourteen sewage sludge incinerators.

EPA is offering you an opportunity to confer with us about the violations cited in the NOV. At the conference, you may present information on the specific findings in the NOV, and the steps you will take to bring the facility into compliance. You will also be given the opportunity to provide information concerning all ongoing and planned modifications at the plant. 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.

You may contact Daniel Schaufelberger at (312) 886-6814 to request a conference. You should make the request for a conference no later than 10 calendar days after receipt of this letter, and we should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

Cheryl L(Mewton

Director

Air and Radiation Division

## Enclosure

cc: Thomas Hess, Michigan Department of Environmental Quality Christopher Ethridge, Michigan Department of Environmental Quality

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)	
City of Detroit Detroit Water and Sewerage Department Detroit, Michigan	)	Proceedings Pursuant to Section 113(a)(1) and (3) of the Clean Air Act 42 U.S.C. § 7413(a)(1) and (3)
	) ) )	EPA-05-12-MI-01

# **NOTICE OF VIOLATION**

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation (NOV or Notice) to the City of Detroit (the City), for violations of the Clean Air Act (the Act), 42 U.S.C. §§ 7401 et seq., at the Detroit Wastewater Treatment Plant (the Plant) located at 9300 West Jefferson, Detroit, Michigan.

This Notice is issued pursuant to Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1). The authority to issue this Notice has been delegated to the Regional Administrator of EPA, Region 5, and redelegated to the Director, Air and Radiation Division, Region 5.

#### STATUTORY AND REGULATORY BACKGROUND

- 1. The Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).
- 2. When the Act was passed in 1970, Congress exempted existing facilities, such as the wastewater treatment plant that is the subject of this Notice, from many of its requirements. However, Congress also made it quite clear that this exemption would not last forever. As the United States Court of Appeals for the D.C. Circuit explained, "[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." Alabama Power v. Costle, 636 F.2d 323, 400 (D.C. Cir. 1979). Rather, when a grandfathered facility intends to perform modifications at the facility that may significantly increase emissions, the Act requires the company to install modern pollution control devices.
- The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the Act, 42 U.S.C. §§ 7470-7492, and their implementing regulations at 40 C.F.R. § 52.21 (collectively "the PSD Program"), establish specific pre-construction requirements applicable to the construction and

modification of "major emitting facilities" located in areas designated as either attainment or unclassifiable for purposes of meeting the National Ambient Air Quality Standards.

- 4. The PSD Program prohibits, among other things, a "major emitting facility" from constructing a "major modification" unless it has obtained a PSD permit that applies "Best Available Control Technology" (BACT) to control emissions from the proposed modified emissions unit, and conducts an analysis to determine the air quality impacts of the modification. Sections 165(a) and 169(2)(C) of the Act, 42 U.S.C. §§ 7475(a) and 7479(2)(C), and 40 C.F.R. § 52.21(i).
- 5. Pursuant to Section 169 of the Act, 42 U.S.C. § 7479(1), a "major emitting facility" is defined to include, among others, any stationary source which emits, or has the potential to emit, 250 tons per year or more of any regulated PSD pollutant.
- 6. Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a state implementation plan (SIP) containing regulations implementing the PSD Program.
- 7. A state may comply with Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, by having its own PSD regulations approved by EPA as part of its SIP, provided that the state PSD regulations are at least as stringent as those set forth at 40 C.F.R. § 51.166.
- 8. Pursuant to 40 C.F.R. § 52.21(a), if a state does not have PSD regulations that EPA has approved and incorporated into its SIP, EPA may incorporate the federal PSD regulations set forth at 40 C.F.R. § 52.21 into the SIP.
- 9. Pursuant to 40 C.F.R. § 52.23, any person failing to comply with an approved regulatory provision of a SIP is subject to an enforcement action under Section 113 of the Act, 42 U.S.C. § 7413.
- 10. On August 7, 1980, EPA disapproved Michigan's proposed PSD program, and incorporated by reference the PSD regulations of 40 C.F.R. § 52.21(b) through (w) into the Michigan SIP. 45 Fed. Reg. 52676, 52741. EPA delegated to the Michigan Department of Environmental Quality (MDEQ) the authority to issue PSD permits through the federal PSD rules at 40 C.F.R. § 52.21 (via delegation letter dated September 26, 1988). Effective October 16, 2008, EPA conditionally approved Michigan's PSD rules at Mich. Admin. Code R 336.2801 to R 336.2819 (except R 336.2816, "Sources Impacting Federal Class I areas-Additional Requirements") and R 336.2823(1) to (14). 73 Fed. Reg. 53366 (September 16, 2008). On March 25, 2010, EPA provided final approval of Michigan's PSD rules, with the exception of R 336.2816. 75 Fed. Reg. 14352.
- 11. R 336.2801(cc)(ii) defines a "major stationary source" as any stationary source not identified in 40 C.F.R. § 52.21(b)(1)(i)(a) and R 336.2801(cc)(i) with the potential to emit 250 tons per year or more of a regulated New Source Review (NSR) pollutant.
- 12. R 336.2801(aa) defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase.

- 13. R 336.2801(ee) defines "net emissions increase" as the amount by which the sum of the increase in emissions from a physical change or change in the method of operation and any other contemporaneous increases or decreases in emissions exceeds zero.
- 14. R 336.2801(qq)(A) defines "significant" with regard to a carbon monoxide (CO) net emissions increase as a rate of emissions that would equal or exceed 100 tons per year.
- 15. R 336.2801(qq)(B) defines "significant" with regard to an oxides of nitrogen (NOx) net emissions increase as a rate of emissions that would equal or exceed 40 tons per year.
- 16. R 336.2801(qq)(D) defines "significant" with regard to a particulate matter (PM) and PM<sub>10</sub> (particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers) net emissions increases as a rate of emissions that would equal or exceed 25 tons per year and 15 tons per year, respectively.
- 17. R 336.2801(qq)(G) defines "significant" with regard to a fluorides net emissions increase as a rate of emissions that would equal or exceed 3 tons per year.
- 18. R 336.2801(nn) defines "regulated NSR pollutant" as either a pollutant for which a national ambient air quality standard has been promulgated or a pollutant that is subject to any standard promulgated under Section 111 of the Act, 42 U.S.C. § 7411.
- 19. R 336.2802(3) requires that no new major stationary source or major modification shall begin actual construction without a permit to install that states that the major stationary source or major modification will meet the PSD requirements.
- 20. R 336.2810(3) requires that owners or operators making a major modification, among other things, apply BACT for each regulated NSR pollutant for which the modification would result in a significant net emissions increase.
- 21. R 336.2801(f) defines "BACT" as an emissions limitation based on the maximum degree of reduction for each regulated PSD pollutant that would be emitted from any proposed major modification while taking into account energy, environmental, and economic impacts and other costs.

#### FINDINGS OF FACT

- 22. The Detroit Water and Sewerage Department (DWSD) is a department of the City.
- 23. The City is a "person," as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).
- 24. DWSD currently operates emission units at the Plant. These include sewage sludge incinerators Nos. 1 through 14.

- 25. In 2010, DWSD began rehabilitating its sewage sludge incinerators, primarily as a means to increase the Plant's total sludge processing capacity by approximately 700 dry tons of sewage sludge per day.
- 26. When completed at all 14 incinerators, the rehabilitation project should result in significant net emissions increases at the Plant of CO, NOx, PM/PM<sub>10</sub>, and fluorides greater than the PSD significance levels identified in paragraphs 14 through 17, above.
- 27. Carbon monoxide, NOx, and PM/PM<sub>10</sub> are pollutants for which a national ambient air quality standard has been promulgated and fluorides is a pollutant subject to standards promulgated under Section 111 of the Act, 42 U.S.C. § 7411. Therefore, CO, NOx, PM/PM<sub>10</sub>, and fluorides are "regulated NSR pollutants," as that term is defined under R 336.2801(nn).
- 28. The Plant emits, or has the potential to emit, regulated NSR pollutants in excess of 250 tons per year, and is thus a "major stationary source," as that term is defined at R 336.2801(cc).
- 29. Prior to initiating the rehabilitation project at the facility's incinerators, the City did not obtain a PSD permit that contained, among other things, a requirement to apply BACT to control emissions of NOx, CO, PM/PM<sub>10</sub>, and fluorides.

#### NOTICE OF VIOLATION

- 30. The rehabilitation project described in Paragraph 25 has caused and/or will cause a "significant net emissions increase" of CO, NOx, PM/PM<sub>10</sub>, and fluorides, as defined in R 336.2801(ee) and (qq).
- 31. The rehabilitation project described in Paragraph 25 constitutes a "major modification," as that term is defined at R 336.2801(aa).
- 32. Prior to beginning actual construction of the rehabilitation project described in Paragraph 25, the City failed to apply for and obtain a permit to install that included, among other terms, a requirement to apply BACT for CO, NOx, PM/PM<sub>10</sub>, and fluorides, as required by R 336.2802(3) and R 336.2810(3).
- 33. The City is in violation of the PSD requirements found at R 336.2802(3) and R 336.2810 for failing to apply for and obtain a permit to install prior to beginning actual construction of the rehabilitation project, for failing to install appropriate emissions control equipment in accordance with a BACT analysis and for continuing to operate the modified facility without BACT.

### **ENFORCEMENT AUTHORITY**

34. Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), provides in part 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 applicable SIP, 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.

heryl h. Newton

Director

Air and Radiation Division

# CERTIFICATE OF MAILING

I, Tracy Jamison, certify that I sent a Notice of Violation, No. **EPA-05-12-MI-01** by Certified Mail, Return Receipt Requested, to:

Samuel A. Smalley Assistant Director – Wastewater Operations Detroit Water and Sewerage Department 9300 West Jefferson, Suite 103 Detroit, Michigan 48209

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

Thomas Hess
Enforcement Unit Chief
Michigan Department of Environmental Quality
Air Quality Division
P.O. Box 30260
Lansing, Michigan 48909

Christopher Ethridge
Acting District Supervisor
Michigan Department of Environmental Quality
Southeast Michigan District Office
Air Quality Division
27700 Donald Court
Warren, Michigan 48092-2793

on the Holay of Jan, 2012.

Tracy Jamison

Administrative Program Assistant Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7673 9122