



1920 L Street NW, Suite 800
Washington, DC 20036
p: 202-296-8800 f: 202-296-8822
www.environmentalintegrity.org

May 21, 2009

VIA FACSIMILE AND CERTIFIED MAIL

Administrator Lisa P. Jackson
U.S. Environmental Protection Agency
Ariel Rios Building, Mail Code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Fax Number: (202) 501-1450

Re: Petition for objection to Wheelabrator Baltimore, L.P. Title V Permit No. 24-510-01886, for operation of a municipal solid waste incinerator located at 1801 Annapolis, Baltimore, MD 21230

Dear Administrator Jackson:

Enclosed is a petition requesting that the U.S. Environmental Protection Agency (EPA) object to the Title V Permit No. 24-510-01886 issued to Wheelabrator Baltimore, L.P. for operation of a municipal solid waste incinerator (Permit). This petition is timely submitted by the Environmental Integrity Project, the Baltimore Harbor Waterkeeper, Inc., and Clean Water Action (collectively, Petitioners) pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), 40 C.F.R. 70.8(d). As required by these provisions, Petitioners are filing this Petition with the EPA Administrator, with copies to the Maryland Department of the Environment (MDE), Wheelabrator Technologies, Inc., Wheelabrator Baltimore, L.P., and the EPA Region III Air Permit Section Chief.

As explained in our petition, we believe that the Title V permit for Wheelabrator includes conditions inconsistent with the Clean Air Act, as that law has been interpreted by federal courts and implemented by the USEPA for more than a decade.

The Title V permit alters PSD hourly emission limits for nitrogen oxide and carbon monoxide by lengthening the averaging time used to determine compliance. The PSD permit initially determined compliance with hourly emission limits for nitrogen oxide and other pollutants based on an average of no more than nine test runs. The Title V permit provides that compliance will be based on twenty four hour averages, effectively converting the PSD hourly standards into daily limits. The permit does not specify a monitoring method for PSD permit limits, suggesting only that the state will identify one in the future. MDE also asserts that annual stack tests are adequate to determine compliance with short term emission limits for mercury and other toxic metals.

MDE has offered various rationales for these decisions that have either been rejected by EPA, or which do not bear close scrutiny:

- MDE argues that converting hourly emission limits to daily ones is “reasonable.” Petitioners have not challenged the state’s right to propose increases in PSD limits by reopening the PSD permit and following the proper procedures for amending its requirements. But as EPA has made clear, these procedural requirements may not be bypassed by altering PSD terms in a Title V permit, especially where modifications may increase short term emissions in a region that must meet eight-hour standards for ozone.
- MDE suggests that because compliance with PSD limits was initially determined using stack tests, the use of continuous monitors to measure compliance would make those original standards more stringent. EPA has long held that improved monitoring does not alter the stringency of an emission limit. Moreover, this position has been consistently upheld by federal courts. Maryland jurisdictions raise millions of dollars in revenue every year through “photo enforcement” of speed limits—we doubt the State would agree with offenders who tried to argue that the use of cameras had somehow raised speed limits in our state.
- Our comments conceded that compliance could be based on as much as a nine hour average, since the original PSD permit allowed the average of up to nine test runs to be used to determine compliance with the hourly standard. In response, MDE is now arguing that “test runs” used to measure compliance with short term standards may be of indeterminate length, i.e., a single test run may last many hours. That position is inconsistent with EPA rules that state clearly that a test run used to determine compliance with a standard ought to bear a reasonable position to the duration of that standard. The state’s position invites petitioners to challenge the use of “test runs” wherever they are used to determine compliance with the Clean Air Act in Maryland, since their length in relationship to the underlying emission limits is apparently random.
- The permit specifies no monitoring method for nitrogen oxide or carbon monoxide PSD limits, which are expressed in pounds per hour. Instead, the permit promises to define a monitoring method at some future date. The D.C. Circuit Court of Appeals has said very clearly that *each* Title V permit *must* include a monitoring method sufficient to determine compliance with *each* emission standard. This statutory responsibility cannot be satisfied by a promise to address it one day after the permit has issued. The state already uses continuous emission monitors to measure the concentration of NOx in Wheelabrator’s flue gas, and readily available flow monitors could be used to convert these concentrations into pounds per hour.
- MDE fails to include sufficient monitoring of short term limits for metals such as mercury in the Wheelabrator Permit, relying on New Source Performance Standards (NSPS) Emission Guidelines to conduct annual stack tests instead. MDE has not shown that that annual stack tests can accurately measure emissions of mercury and other pollutants on an hourly basis and under varying operating conditions. For example, the

limited data available for mercury shows that stack test results can vary by an order of magnitude from one year to the next. The D.C. Circuit's 2008 decision specifically called into question the use of an annual test to measure compliance with short term limits. The court's question cannot be answered by simply restating requirements that may no longer satisfy the court's mandate.

For all of these reasons, we respectfully request that you object to the Wheelabrator Title V permit. Thank you for your prompt attention to this matter.

Sincerely,



Jennifer Peterson
Attorney
ENVIRONMENTAL INTEGRITY PROJECT
1920 L Street NW, Suite 800
Washington, DC 20036
(202) 263-4449
(202) 296-8822 FAX
jpeterson@environmentalintegrity.org

*On behalf of Environmental Integrity
Project, Baltimore Harbor Waterkeeper,
and Clean Water Action*

cc (certified mail):

George (Tad) Aburn, Director
Air & Radiation Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Shari Wilson, Secretary
Maryland Department of the Environment
4 Liberty Lane West
Hampton, NH 03842

Mark Weidman, President
Wheelabrator Technologies, Inc.
4 Liberty Lane West
Hampton, NH 03842

Mark Santella, Regional VP
Wheelabrator Technologies, Inc.
1801 Annapolis Road
Baltimore, MD 21230

Registered Agent
Wheelabrator Baltimore, L.P.
The Corporation Trust Incorporated
300 E Lombard Street
Baltimore, MD 21202

Christopher Leyen, Plant Manager
Wheelabrator Baltimore, L.P.
1801 Annapolis Road
Baltimore, MD 21230

U.S. Environmental Protection Agency
Attn: Air Permit Section Chief, Region III
1650 Arch Street (3AP00)
Philadelphia, PA 19103-2029

**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY**

BEFORE THE ADMINISTRATOR

IN THE MATTER OF)	PETITION FOR OBJECTION
)	
Proposed Clean Air Act Title V)	Permit Number 24-510-01886
Operating Permit Issued to Wheelabrator)	
Baltimore, L.P.)	
_____)	

Pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. §70.8(d), the Environmental Integrity Project, Baltimore Harbor Waterkeeper, Inc., and Clean Water Action (collectively, Petitioners) petition the Administrator of the U.S. Environmental Protection Agency to object to the proposed Title V Operating Permit Number 24-510-01886 issued by the Maryland Department of the Environment (MDE) to Wheelabrator Baltimore, L.P. for the operation of a solid waste incinerator (Wheelabrator Permit or Permit). As required by these cited provisions, Petitioners are filing this Petition with the EPA Administrator, and providing copies to the MDE, Wheelabrator Baltimore, L.P., and the EPA Region III Air Permit Section Chief.

The Environmental Integrity Project (EIP) is a national nonprofit organization dedicated to advocating for more effective enforcement of environmental laws. EIP's ability to carry out its mission of improving the enforcement of environmental laws will be adversely impacted if EPA fails to object to this Permit.

Baltimore Harbor Waterkeeper, Inc. (BHW) is a non-profit membership organization that is incorporated in the State of Maryland with an office in Baltimore. BHW and its members seek

to protect and restore Baltimore Harbor and the greater Patapsco River and its tributaries through enforcement, fieldwork, and citizen action, in order to make the river suitable for recreation, to improve public health, and to improve the health of the river ecosystem. To effectuate its mission, BHW is specifically focused on enforcement of state and national environmental laws. The process of waste incineration produces toxic air emissions such as hydrogen chloride, nitric oxide, toxic metals, mercury, and dioxins. These emissions fall onto the surrounding land and run off into water or fall onto surrounding water directly. It is estimated that a quarter to one third of the nitrogen that enters the Chesapeake Bay comes from air deposition. BHW members live, work, and recreate in waters and breathe the air impacted by the Wheelabrator Incinerator. BHW and its members have an interest in assuring that the Wheelabrator Permit contains all federally applicable requirements and monitoring adequate to assure compliance with those requirements. BHW and members of BHW will be adversely impacted if EPA fails to object to the Permit.

Clean Water Action (CWA) is a non-profit membership organization that is incorporated in the State of Maryland with an office in Baltimore. CWA and its members seek to “empower people to take action to protect America’s waters, build healthy communities and to make democracy work for all of us.”¹ The process of waste incineration produces toxic air emissions such as hydrogen chloride, nitric oxide, toxic metals, mercury, and dioxins. These emissions fall onto the surrounding land and run off into water or fall onto surrounding water directly. It is estimated that a quarter to one third of the nitrogen that enters the Chesapeake Bay comes from air deposition. CWA members live, work, and recreate in waters and breathe the air impacted by the Wheelabrator Incinerator. CWA and its members have an interest in assuring that the

¹ Clean Water Action, About Us, <http://www.cleanwateraction.org/about> (last visited May 5, 2009).

Wheelabrator Permit contains all federally applicable requirements and monitoring adequate to assure compliance with those requirements. CWA and members of CWA will be adversely impacted if EPA fails to object to this Permit.

EPA must object to the Wheelabrator Permit because it is not in compliance with the Clean Air Act. Specifically, the Permit illegally weakens the prevention of significant deterioration (PSD) pounds per hour limits for carbon monoxide (CO) and nitrogen dioxide (NO₂) and does not include monitoring requirements that ensure compliance with short term limits for several pollutants.

BACKGROUND

Wheelabrator Baltimore, L.P. owns and operates a municipal solid waste incinerator located at 1801 Annapolis Road, Baltimore, MD 21230 (Wheelabrator Incinerator). The Wheelabrator is permitted to burn over 820,000 tons of solid waste in three large mass burn waterwall municipal waste combustors. Air & Radiation Mgmt. Admin., Md. Dep't of the Env't, Wheelabrator Baltimore, L.P., Part 70 Operating Permit Fact Sheet (No. 24-510-01886) 1-2 (Jan. 30, 2009). The Wheelabrator Incinerator is a major emitter of numerous air pollutants, including sulfur oxides (SO_x), nitrogen oxides (NO_x), and hazardous air pollutants (HAPs). See id.

MDE issued an initial draft Title V Permit for the Wheelabrator Incinerator in January of 2008 for public comment. EIP submitted timely comments on the initial draft Title V permit on February 7, 2008. See App. A (EIP's Comments to MDE (February 7, 2008)). In response to our comments, MDE issued the Wheelabrator Permit, a revised draft Title V Permit for the Wheelabrator Incinerator, on January 30, 2009. During the public comment period for the Wheelabrator Permit EIP, BHW, and CWA timely submitted written comments to MDE on

March 9, 2009. Petitioners raised all issues in this Petition in their comments to MDE. See App. B (Petitioners' Comments to MDE (March 9, 2009)). MDE responded to these comments on May 11, 2009. See App. C (Response to Petitioners' Comments (May 11, 2009)). According to the EPA Region III Title V website, MDE submitted a proposed Title V permit for the Wheelabrator Incinerator to EPA on March 25, 2009, and the EPA review period ended on May 8, 2009. U.S. Env'tl. Prot. Agency, Mid-Atlantic Air Protection, Title V Air Operating Permits Database: Deadlines for Public Petitions to the Administrator for Permit Objections, <http://www.epa.gov/reg3artd/permitting/petitions3.htm> (last visited May 5, 2009). MDE has not issued a final Title V Permit for the Wheelabrator Incinerator as of the date of this petition.

SPECIFIC OBJECTIONS

“If any [Title V] permit contains provisions that are determined by the Administrator as not in compliance with the applicable requirements of this chapter...the Administrator *shall*...object to its issuance.” CAA §505(b)(1), 42 U.S.C. § 7661d(b)(1) (emphasis added). EPA “does not have discretion whether to object to draft permits once noncompliance has been demonstrated.” See *N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 334 (2d Cir. 2003) (holding that EPA is required to object to Title V permits once petitioner has demonstrated that permits do not comply with the Clean Air Act).

I. The Permit Illegally Weakens the PSD Pounds Per Hour Limits for CO and NO₂.

EPA must object to the Wheelabrator Permit because the Permit illegally weakens the PSD pounds per hour limits for CO and NO₂ by allowing Wheelabrator to demonstrate compliance with a 24-hour rolling average. Expanding the time period for demonstrating compliance from a three-hour average to a 24-hour average effectively authorizes an emissions increase and weakens existing emission limits in violation of section 116 and Title V of the

Clean Air Act. In fact, MDE revised the initial draft Title V Permit to require that compliance with the sulfur dioxide (SO₂) hourly PSD limit be based on a 3-hour rolling average in response to our initial comments. See App. A and Air & Radiation Mgmt. Admin., Md. Dep't of the Env't, Wheelabrator Baltimore, L.P., Part 70 Operating Permit (No. 24-510-01886) 34 (Jan. 30, 2009). MDE may not expand the compliance averaging period specified in the PSD permit to a "reasonable time period" to offset the increased accuracy and frequency of continuous emissions monitoring or compensate for emissions generated during startup, shutdown, and malfunction (SSM) events through the Title V permitting process. If MDE wishes to authorize changes to the terms of the Wheelabrator PSD permit, MDE must follow procedures to modify the PSD permit.

A. Expanding the compliance averaging period from a three-hour average to a 24-hour average authorizes an emissions increase above PSD permit limits.

Wheelabrator must comply with PSD limits for CO and NO₂ *every hour*. See App. D (Md. Dep't of the Env't, BRESCO Limited Partnership Prevention of Significant Deterioration Approval (PSD 83-101) (Feb. 21, 1986)). However, the Permit allows Wheelabrator to demonstrate compliance with CO and NO₂ hourly limits with a 24-hour rolling average. Air & Radiation Mgmt. Admin., Md. Dep't of the Env't, Wheelabrator Baltimore, L.P. Draft Part 70 Operating Permit (No. 24-510-01886) 34 (Jan. 30, 2009).

Petitioners concede that the Permit may authorize Wheelabrator to demonstrate compliance with CO and NO₂ PSD emission limits with 3-hour, and perhaps 9-hour, averages because the conditions to the 1986 PSD Permit state that "[c]ompliance shall be determined by the average of not less than 3 test runs nor more than 9 test runs." App. C at 2. Each "test run" should be approximately one hour. See Md. Code Regs. 26.11.01.04(C); 40 C.F.R. pt. 60 app.

A-4; 40 C.F.R. § 60.8(f). Sources must use emission test methods located in Part 60 of the Code of Federal Regulations or the Department's Technical Memorandum 91-101, "Test Methods and Equipment Specifications for Stationary Sources."² Md. Code Regs. 26.11.01.04(C). Part 60 states that "[e]ach [test] run shall be conducted for the time and under the conditions specified in the applicable standard." 40 C.F.R. § 60.8(f). Although the CO and NO₂ emission limits are not a new source performance standard, these regulations are instructive as to the duration of a test run absent a specific time frame defined in the PSD permit.³ This is particularly true in light of the fact that Maryland regulations specify the use of EPA test methods in Part 60, and MDE's response to our comments states that the PSD limits were established using EPA Reference Methods tests. Md. Code Regs. 26.11.01.04(C); App. C, at 1.

In response to our comments, MDE states that "the goal for testing is to collect a representative sample of stack gases that reflects the emissions from a source, and in the case of an incinerator, a 24 hour period for NO_x is a reasonable time period." App. C, at 1. MDE asserts that test runs used to measure compliance with short terms standards may last many hours. *Id.* However, the duration of the stack test must bear some relationship to the underlying emission standard. See 40 C.F.R. § 60.8(f). The PSD Permit establishes hourly limits for CO and NO₂. Thus, the compliance averaging period should not be greater than nine hours.

There is no question that expanding the averaging period for determining compliance from nine hours to 24 hours authorizes an emissions increase when compared to the hourly emission limits established in the PSD permit. For example, suppose Wheelabrator Incinerator

² Petitioners requested, but have not yet received, a copy of Technical Memorandum 91-101.

³ Petitioners note that the Wheelabrator PSD permit states that "test methods shall be as specified in the Department's TM 83-05. Petitioners requested, but have not yet received, a copy of the TM 83-05. However, MDE's response to our comments does not assert that TM 83-05 or TM 91-101 specifies the duration of a test run. In fact, MDE states that the PSD permit establishes emission standards "based on the results of averaging from 3 up to 9 test runs using EPA Reference Method tests[.]" and notes that EPA guidance does not specify the duration for a stack test. App. C, at 1.

emitted an average of 330 pounds an hour of NOx over one nine hour period and 270 pounds per hour over the next fifteen hours. Under the 1986 PSD Permit, Wheelabrator would have exceeded its emission limit. In contrast, the Wheelabrator Permit would excuse the higher emissions by allowing them to be offset over a much longer time period. By expanding the compliance averaging period, MDE has turned the hourly PSD limit into a daily limit.

B. MDE may not weaken emission limits established in a PSD permit issued pursuant to the SIP through the Title V permitting process.

MDE may not modify emission limits in a PSD permit through the Title V permitting process. EPA has stated that the terms of a construction permit can't be deleted, omitted, or changed through the Title V permitting process. Specifically, EPA states that the requirements of a construction permit

may not be omitted or deleted from operating permits until they first have been removed from the underlying preconstruction permits. Alternatively, the change could be processed in both permits concurrently, as a form of 'parallel processing.'...We wish to make clear now that...the Division should use its construction permit modification procedures to delete or change short term limits in the underlying construction permit before, or at the same time as, you delete any of these limits from the operating permit for the facility.

Letter from Richard R. Long, Dir., Air & Radiation Program, U.S. Env'tl. Prot. Agency Region 8 to Dave Ouimette, Air Pollution Control Div., Co. Dep't of Public Health & Env't (Sept. 22, 1998) [hereinafter Long Letter].

PSD permits in Maryland are issued pursuant to requirements established in Maryland's SIP. See Md. Code Ann. § 26.11.02; 40 C.F.R. § 52.1070(c). PSD permit emission limits are "applicable requirements" that must be included in a source's Title V permit. 42 U.S.C. § 7661c(a); 40 C.F.R. §§ 70.6(a), 70.2.

Section 116 of the Clean Air Act prohibits states from enforcing emission standards or limits that are less stringent than its state implementation plan (SIP).⁴ 42 U.S.C. § 7416. MDE may not weaken emission limits in a PSD permit through the Title V permitting process. 42 U.S.C. § 7416; See Duquesne Light Co. v. U.S. Env'tl. Prot. Agency, 698 F.2d 456, 468 n. 12 (D.C. Cir. 1983) (noting that states may not weaken emission limits unless EPA approves a SIP amendment that reflects the less stringent limits).

The pounds per hour emission limits established in the PSD permit for CO and NO₂ authorize Wheelabrator to demonstrate compliance with either a three-hour average, nine-hour average, or an average between three and nine hours. If MDE wishes to authorize an expansion of the averaging period used to demonstrate compliance beyond nine hours (i.e. modify the terms of the PSD permit), MDE must follow its procedures for modifying construction permits. See Long Letter.

The goals of the PSD program are clearly defeated if MDE is able to modify conditions of PSD permits through the Title V permitting process. EPA states that “[a] rigorous preconstruction review for PSD would ultimately not be effective if sources could readily obtain subsequent relaxations to their permit conditions under a lax policy for [PSD] permit revisions.”⁵ Here, MDE proposes to modify the terms of the PSD permit without submitting the proposed changes to *any* PSD review process. MDE may not amend the terms of the PSD permit through the Title V permitting process.

⁴ The terms “emission limitation” and emission standard” are defined broadly, and include any “requirement established by the State or Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard” Id. § 7602(k).

⁵ Memorandum from Darryl Tyler, Control Programs Dev. Div., U.S. Env'tl. Prot. Agency to Dir., Air Division, Regions I-X, U.S. Env'tl. Prot. Agency, on Revised Draft Policy on Permit Modifications and Extensions (EPA7GEN000737) 3–4 (July 5, 1985), available at, <http://www.epa.gov/region07/programs/artd/air/nsr/nsrmemos/permmmod.pdf>.

C. MDE may not expand the compliance averaging period for PSD emission limits to a “reasonable time period” without first modifying the PSD permit.

MDE argues that MDE may expand the compliance averaging period specified in the PSD permit to a “reasonable time period” through the Title V permitting process. Specifically, MDE states that a 24-hour average for compliance is necessary because (1) Wheelabrator now uses continuous emissions monitoring (CEMs), as opposed to annual stack tests, to demonstrate compliance with the PSD emission limits and (2) MDE has clarified that the Wheelabrator incinerator is not exempt from compliance with the PSD emission limits during startup, shutdown, and malfunction (SSM) events. See App. C. Petitioners note that MDE is free to modify the terms of Wheelabrator’s PSD permit to address these concerns by following its procedures for modifying a PSD permit. As discussed previously, MDE may not weaken PSD emission limits through the Title V permitting process.

First, Wheelabrator may not escape compliance with the PSD emission limits simply because CEMs is more likely to detect a violation than an annual stack test. MDE argues that “[w]ith the use of continuous emissions monitors, NOx concentrations are measured at all times. As a consequence, compliance with a short term averaging time is problematic when the nitrogen content in the trash stream is varying. . . .” App. C, at 1.

EPA has said that “[allowing the use of radar guns or increasing the number of police checking for speeding may raise the chance that a speeder will be detected, but this does not alter the legal stringency of a posted speed limit.” Credible Evidence Revisions, 62 Fed. Reg. 8314, 8326 (Feb. 24, 1997). Furthermore, at least one court has squarely rejected this type of argument in the context of enforcement and the credible evidence rule. Sierra Club v. Tenn. Valley Auth., 430 F.3d 1337, 1346–50 (11th Cir. 2005). The 11th Cir. Court of Appeals sums up the argument

advance by the Tennessee Valley Authority in their effort to avoid liability for opacity violations, stating that

[t]he gist of TVA’s argument is that a 2% safe harbor from the opacity limitation is needed to loosen the tighter pinch of the opacity limitation when enforced through the relentlessly effective COMS method with the hit-and-miss (mostly miss) enforcement possible with Method 9. It’s a brassy argument.

Id. at 1348. An increase in the accuracy and/or frequency of monitoring does not increase the stringency of the underlying emission limit.

The 11th Circuit found that the State of Alabama’s 2% de minimis exemption from compliance with the opacity limit was not approved by EPA as part of the Alabama SIP, and was “an attempt to unilaterally revise the opacity limitation without submitting the revision to the rigors of the SIP amendment process.” Sierra Club v. Tenn. Valley Auth., 430 F.3d at 1348. Similarly, MDE’s expansion of the averaging period for the CO and NO₂ PSD emission limits through the Title V permitting process effectively modifies the emission limits of a PSD permit without the rigors of, and the protections afforded by, the PSD permitting process.

Second, MDE may not expand the averaging period for PSD emission limits to offset emissions generated during SSM events. MDE states that “[o]bviously, stack tests are not performed during periods of startup, shutdown, or malfunction so compliance with the PSD Approval limits were never intended to be demonstrated during periods of SSM.” App. C, at 2. MDE’s argument that excess emissions produced during SSM events are implied in the PSD permit because compliance was initially determined with a stack test is without merit.

The Wheelabrator PSD permit does not include an exception for SSM emissions. In addition to the absence of an express exemption from compliance with emission limits in the PSD permit, EPA has a long held policy that PSD limits apply at all times—including during

SSM events.⁶ In its memorandum disallowing blanket exemptions from compliance with SIP limits during SSM events, EPA notes that “because excess emission might aggravate air quality so as to prevent attainment or interfere with maintenance of the ambient air quality standards, *EPA views all excess emissions as violations of the applicable emission limitation.*”⁷ This rationale applies equally to PSD emission limits “not only because PSD is ambient-based but also because generally, the PSD program is part of the SIP. Even in States where the PSD program is not SIP approved, the emissions limits are established to protect increments and the national ambient air quality standards [NAAQS].”⁸

The absence of any express exemption from compliance with PSD emission limits during SSM events, coupled with EPA’s long held policy that PSD emission limits apply at all times, can only mean that Wheelabrator must comply with PSD emission limits during SSM events. MDE may not expand the compliance averaging period to effectively excuse compliance with the PSD emission limits during SSM events through the Title V process.

In conclusion, MDE may not use Title V as a vehicle to weaken emission limits established in a PSD permit issued pursuant to the SIP. MDE has a solution to address its concerns that Wheelabrator is unable to comply with PSD emission limits: modify the PSD permit. EPA must object to the Wheelabrator Permit because the Title V Permit authorizes emission limits for CO and NO₂ that are less stringent than the PSD permit and Maryland SIP.

⁶ See, e.g., Memorandum from John B. Rasnic, Dir., Stationary Source Compliance Div., U.S. Env’tl. Prot. Agency, on Automatic of Blanket Exemptions for Excess Emissions During Startup, and Shutdowns Under PSD to Linda M. Murphy, Dir., Air, Pesticides & Toxics Mgmt. Div., U.S. Env’tl. Prot. Agency (Jan. 28, 1993).

⁷ Memorandum from Steven A. Herman, Asst. Adm’r for Enforcement & Compliance, U.S. Env’tl. Prot. Agency, on State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown to Regional Administrators, Regions I – X (Sept. 20, 1999) (emphasis added).

⁸ Memorandum from John B. Rasnic, Dir., Stationary Source Compliance Division, Office of Air Quality Planning & Standards, U.S. Env’tl. Prot. Agency, on Automatic of Blanket Exemptions for Excess Emissions During Startup, and Shutdowns Under PSD to Linda M. Murphy, Dir., Air, Pesticides & Toxics Mgmt. Div., Region I, U.S. Env’tl. Prot. Agency (Jan. 28, 1993).

II. The Wheelabrator Permit Fails to Include Monitoring Sufficient to Assure Compliance with Short Term Emission Limits for Several Pollutants.

EPA must object to the Wheelabrator Permit because the Permit does not include monitoring requirements that assure compliance with short term emission limits. Specifically, the Permit does not specify the methodology for demonstrating compliance with the PSD pounds per hour limits for SO₂, CO, and NO₂, and fails to include adequate monitoring for short term emission limits for particulate matter (PM), mercury, cadmium, lead, hydrogen chloride, and dioxins/furans.

The Clean Air Act states that Title V permits must include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. 42 U.S.C. § 7661c(c). On August 19, 2008, the D.C. Circuit Court of Appeals vacated an EPA rule that would have prohibited MDE and other state authorities from adding monitoring provisions to Title V permits if needed to “assure compliance.” See *Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir. 2008). The Court emphasized the *statutory duty* to include adequate monitoring in Title V permits, noting that

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that “[e]ach permit...shall set forth...monitoring...requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirement insufficient ‘to assure compliance’ with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards.

Id. at 677. In addition, the Court acknowledged that the mere existence of periodic monitoring requirements may not be sufficient. Id. at 676–77. The Court noted that annual testing is unlikely to assure compliance with a daily emission limit. Id. at 675. In other words, the

frequency of monitoring must bear some relationship to the averaging time used to determine compliance. The Court's decision removed any doubt about MDE's authority to supplement monitoring in Title V permits when needed to "assure compliance" with emission limits.

MDE's assertion that "Title V permits is not the appropriate mechanism for imposing enhanced monitoring such as CEMS on a source" is puzzling in the wake of the D.C. Circuit Court of Appeals' decision." App.C, at 3. The Court specifically emphasized the statutory duty of permitting agencies to supplement Title V permits with additional monitoring where necessary to assure compliance with an emission limit. Sierra Club, 536 F.3d at 677. It appears that MDE assumes that the monitoring for PM, mercury, cadmium, lead, hydrogen chloride, and dioxins/furans specified in the regulations for municipal incinerators (i.e. annual stack test) is sufficient because the standards were promulgated after November 15, 1990. App. C, at 3.

The statutory requirement to include adequate monitoring in *each* Title V permit for each emission standard applies regardless of the date the emission standard was enacted. Furthermore, the D.C. Circuit's recent opinion does not qualify the state's duty to ensure adequate monitoring in Title V permits based upon the date the underlying emission standard was enacted. The Clean Air Act requires that each Title V permit include sufficient monitoring, and an annual stack test to ensure compliance with emission standards that must be met on a short term basis is clearly inadequate.

EPA should object to the Wheelabrator Permit until the monitoring provisions are brought into compliance with the Clean Air Act and the D.C. Circuit Court of Appeals' recent decision. Wherever possible, the Permit should require CEMs to measure compliance based on the averaging period in the underlying standard. For example, compliance with an emission limit that has to be met on a daily basis should be measured every day, not once a year. Where

continuous monitoring is not available, the Permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance.

A. The methodology for demonstrating compliance with the PSD pounds per hour limits for SO₂, CO, and NO₂ must be included in the Title V permit.

The Wheelabrator Permit does not include specific monitoring requirements to ensure compliance with the PSD hourly limits for SO₂, CO, and NO₂. See Air & Radiation Mgmt. Admin., Md. Dep't of the Env't, Wheelabrator Baltimore, L.P. Draft Part 70 Operating Permit (No. 24-510-01886) 37 (Jan. 30, 2009). Although the Permit states that Wheelabrator “shall continuously monitor pollutants and other parameters necessary to calculate the pounds per hour PSD limits,” it does not include the specific methodology to convert the continuous emission monitoring (CEM) data (expressed in parts per million) into a mass limit to show that Wheelabrator meets the PSD hourly limits it is subject to. See id. (noting only that “[t]he methodology for calculating the lbs/hr emissions shall be approved by the Department”). The specific method Wheelabrator uses to convert CEM data pertaining to volume of these pollutants to an hourly mass emission rate should be included in the Title V permit. Title V does not allow states to issue a permit without monitoring requirements, on the promise that monitoring methods will be specified at some future date.

MDE's failure to include specific requirements to assure compliance with the PSD hourly limits is even more egregious, since the solution is obvious: Wheelabrator must install and use a flow monitor to measure the volume of gas flow, so that the concentration of the pollutants subject to mass limits can be converted to the mass measurements required to determine compliance. MDE has had over a year to develop a monitoring method to determine compliance with the mass emission limits since EIP first identified the lack of monitoring in the Title V

permit. App. A. In fact, Wheelabrator's compliance certification indicates that the company is already using flow monitoring to measure mass emissions of NOx. See App. B, Attachment B (noting that the NOx pounds per hour calculation is determined by the following formula: $CEM \text{ ppm @ } 7\% = (\text{ppm@}7\%/1000000) * (\text{Airflow} * (20.9 - O_2\%)/13.9) * 60 * (\text{Mol. Wt.}/385)$). The Title V permit must specify a monitoring method to assure compliance with short term mass emission limits for SO₂, CO, and NO₂ in the Title V permit.

B. The Wheelabrator Permit fails to include monitoring sufficient to assure compliance with short term emission limits for several pollutants.

Wheelabrator must comply with short term emission limits for particulate matter, mercury, cadmium, lead, hydrogen chloride, and dioxins/furans. See Air & Radiation Mgmt. Admin., Md. Dep't of the Env't, Wheelabrator Baltimore, L.P. Draft Part 70 Operating Permit (No. 24-510-01886) 43–45 (Jan. 30, 2009). However, the Wheelabrator Permit states that an annual stack test is required to determine compliance with emission limits that must be met continuously. Id. An annual stack test is clearly insufficient to ensure that Wheelabrator is complying with short term emission limits for toxic pollutants.

For example, annual mercury emissions from the Wheelabrator swing sharply from year to year. In 2006, the Wheelabrator facility reported releasing 243 pounds of mercury. See App. B, Attachment B. In 2007, however, Wheelabrator reported releasing 35 pounds. Id. This dramatic difference in reported mercury emissions underscores the need for continuous monitoring. The Title V permit should require CEMs for mercury to ensure Wheelabrator meets mercury limits.

In addition, the Wheelabrator Permit must require CEMs for particulate matter and hydrogen chloride to ensure that Wheelabrator meets short term PM and hydrogen chloride

emission limits. Where continuous monitoring is not available, the Wheelabrator permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance.

In conclusion, EPA should object to the Wheelabrator Title V Permit because it does not include adequate monitoring requirements to assure compliance with the PSD pounds per hour limits or short term emission limits for PM, mercury, cadmium, lead, hydrogen chloride, and dioxins/furans. See 42 U.S.C. §7661c(c); *Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir. 2008). To the extent there are other emission limits in the Wheelabrator Title V Permit that do not have adequate monitoring, these provisions would also violate Title V of the Clean Air Act.

CONCLUSION

EPA must object to the proposed Permit because it is not in compliance with the Clean Air Act. Specifically, the Permit illegally weakens PSD emission limits for CO and NO₂ and does not contain adequate emissions monitoring requirements to assure compliance with emission limits. Without changes to this Permit, Title V's purpose of increasing enforcement and compliance will be defeated. Title V aims to improve accountability and enforcement by "clarify[ing], in a single document, which requirements apply to a source." 57 Fed. Reg. 32250, 32251 (July 21, 1992).

For all of these reasons, Petitioners respectfully request that the Administrator object to the proposed Wheelabrator Title V Permit and require MDE to revise the proposed Permit in accordance with the Clean Air Act and its implementing regulations.

DATED: May 21, 2009

Respectfully submitted,


Jennifer Peterson

Attorney
ENVIRONMENTAL INTEGRITY PROJECT
1920 L Street NW, Suite 800
Washington, DC 20036
(202) 263-4449
(202) 296-8822 FAX
jpeterson@environmentalintegrity.org

*On behalf of Environmental Integrity
Project, Baltimore Harbor Waterkeeper,
Inc., and Clean Water Action*

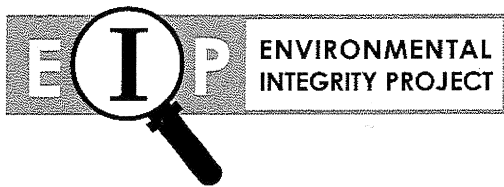
Appendix A

**COMMENTS ON THE PROPOSED PERMIT FOR OPERATION OF
WHEELABRATOR BALTIMORE, L.P. SOLID WASTE INCINERATOR**

Permit Number 24-510-01886

**Submitted By:
THE ENVIRONMENTAL INTEGRITY PROJECT**

February 7, 2008



919 Eighteenth Street NW, Suite 650
Washington, D.C. 20006
p: 202-296-8800 f: 202-296-8822
www.environmentalintegrity.org

February 7, 2008

VIA CERTIFIED MAIL AND ELECTRONIC MAIL

Ms. Shannon Heafey
Air Quality Permits Program
Air and Radiation Management Administration
1800 Washington Blvd., Ste. 720
Baltimore, MD 21230-1720
sheafey@mde.state.md.us

RE: PART 70 OPERATING PERMIT FOR WHEELABRATOR (NO. 24-510-01886)

Dear Ms. Heafey,

Thank you for the opportunity to submit comments on the draft Title V permit for the Wheelabrator municipal waste incinerator in Baltimore, Maryland. We appreciate the considerable effort that the Maryland Department of Environment has made to organize and explain the requirements for this facility, and to make emission limitations and monitoring methods reasonably transparent for the public. Our specific comments are as follows:

a) The December 26, 1995 modification to the initial prevention of significant deterioration (“PSD”) approval appears to be invalid. This modification removed the tonnage restriction on the amount of waste that could be processed annually at the facility based solely on the fact that Maryland was in an attainment area for “inhalable particulate” (“PM10”) at the time. However, the facility was required to demonstrate that increasing the annual throughput¹ would not result in an increase in actual emissions. Md. Code Regs. 26.11.17.02(F)(2)(a). If the modification resulted in a significant emissions increase, the facility would be subject to either a “best available control technology” (“BACT”) or “lowest achievable emission rate” (“LAER”) limit. For example, Baltimore County was designated severe nonattainment for ozone at the time the modification was requested. If the modification resulted in a significant net emissions increase of nitrogen oxide or VOC emissions, the facility would have to meet LAER, as well as off-set increased emissions. There is no evidence from the PSD permit modification that the required analysis was conducted.

After reviewing the 1995 modification, it appears that Bresco, L.P. provided MDE with information demonstrating that the incinerator units could be managed to maintain emission levels below the PSD permit limits while increasing the total amount of waste processed. However, it is not apparent how Bresco, L.P. proposes to constrain emissions while increasing

¹ Although the 1995 modification does not state that MDE is increasing annual throughput, section IV.1 of the draft Title V permit fact sheet says that the original PSD approval was “amended to the current combined total rated capacity of 821,250 tons of refuse per year . . . on December 26, 1995 . . .”

the amount of waste processed. These factors (i.e. limited hours of operation) must be clearly identified and made enforceable in the Title V permit.

b) The draft Title V permit modifies the PSD permit in several ways that impermissibly weaken the PSD emission limits. First, the draft Title V permit eliminates the mass limits for nitrogen dioxide (“NO₂”) and sulfur dioxide (“SO₂”) and purports to replace them with “equivalent” ppm limits.² MDE may not replace a mass PSD limit with a ppm limit without establishing a corresponding limit on flow rate or capacity. The goal of the PSD program is to ensure that a source does not degrade air quality in attainment areas. There is no way to determine whether emissions will violate limits established in the PSD permit under the new ppm limit without identifying flow rate or a capacity limit, and they should be clearly identified in the Title V permit. The PSD mass limits for these pollutants should remain in effect unless the Title V permit is modified to include limits on capacity that ensure that these PSD limits can be met.

Second, the draft Title V permit would effectively amend the PSD permit by authorizing exemptions from PSD limits for emissions during startup, shutdown, and malfunction (“SSM”) events. The PSD permit issued in 1986 and amended in 1995 does not include an exception for SSM events; the PSD permit may not be amended through the Title V process to add exceptions not authorized in the original PSD limit. Table IV-1A incorporates Maryland’s emission limits for large municipal waste incinerators into the permit. These regulations contain an SSM exemption for NO_x, SO₂ and CO emissions.³ Allowing an SSM exemption significantly weakens the PSD limits and is particularly inappropriate here because the Wheelabrator facility is located in a nonattainment area for both fine particulate matter and ozone.

Finally, Wheelabrator must currently comply with PSD limits for NO₂ and SO₂ *every hour*. The draft Title V permit replaces the PSD permit’s pounds per hour emission limit with a limit based on a 24-hour averaging period for both NO₂ and SO₂. Expanding the limit from one hour to a 24-hour average allows for an emissions increase over the PSD limits because the facility is able to violate the limit hourly while complying with the limit over a 24-hour period.

c) MDE does not include compliance assurance monitoring (“CAM”) methods required by law for large emission units with pollution control devices for the PSD mass limit for NO₂. The draft Title V permit states that the CAM rule is inapplicable because a continuous emission monitoring system (“CEM”) is required to demonstrate compliance with the modified PSD limit of 195 ppm for NO₂. However, the PSD mass limit for NO₂ is still in effect unless the Title V permit is modified to include capacity limits. Thus, MDE must include the required CAM methods to demonstrate compliance with the PSD mass limit. MDE should require use of the NO_x CEMS to determine compliance with the PSD limit.

d) MDE has failed to certify compliance for several regulated pollutants. Table V in the draft Title V permit fact sheet states that stack tests indicate that Wheelabrator is in compliance

² See Table IV-1C(1) (amending NO₂ limit from 298 lbs/hr to 195 ppm and SO₂ limit from 375 lbs/hr to 176 ppm).

³ Md. Code Regs. 26.11.08.08(A)(3) (“The standards . . . of this regulation apply at all times except during periods of startup, shutdown, or malfunction . . .”).

with all applicable emission limits. However, the fact sheet only reports the stack test results for particulate matter, dioxins, mercury, and hydrogen chloride. There is no indication that Wheelabrator has certified compliance for several other pollutants, including SO₂, NO_X, carbon monoxide, cadmium and lead. MDE must certify that Wheelabrator is in compliance with emission limits for these pollutants.

e) The draft Title V permit does not specify the date that Wheelabrator must comply with new federal standards for particulate matter, cadmium, mercury, lead, and dioxin/furan. The permit states that the facility must comply with these standards on the date specified in Maryland's regulations implementing the new limits. However, the federal regulations provide for two different compliance dates. Although Md. Code of Regs. 26.11.08.08(A)(2) states that the compliance date is April 28, 2009, the Title V permit should clearly specify this date to avoid any uncertainty.

Thank you for considering our comments.

Sincerely,



Jennifer Peterson
Counsel
Environmental Integrity Project
1920 L Street NW, Suite 800
Washington, DC 20036
(202) 236-4449

Appendix B

**COMMENTS ON THE PROPOSED PERMIT FOR OPERATION OF
WHEELABRATOR BALTIMORE, L.P. SOLID WASTE INCINERATOR**

Permit Number 24-510-01886

Submitted By:

**THE ENVIRONMENTAL INTEGRITY PROJECT
BALTIMORE HARBOR WATERKEEPER, INC.
CLEAN WATER ACTION**

March 9, 2009



1920 L Street NW, Suite 800
Washington, DC 20036
p: 202-296-8800 f: 202-296-8822
www.environmentalintegrity.org

March 9, 2009

VIA CERTIFIED MAIL AND ELECTRONIC MAIL

Ms. Shannon Heafey
Air Quality Permits Program
Air and Radiation Management Administration
1800 Washington Blvd., Ste. 720
Baltimore, MD 21230-1720
sheafey@mde.state.md.us

RE: PART 70 OPERATING PERMIT FOR WHEELABRATOR (NO. 24-510-01886)

Dear Ms. Heafey,

Thank you for the opportunity to submit comments on the draft Title V permit for the Wheelabrator municipal waste incinerator in Baltimore, Maryland issued on January 30, 2009. The process of waste incineration produces toxic air emissions such as hydrogen chloride, nitric oxide, toxic metals, mercury, and dioxins. In addition to the obvious impacts to air quality and public health, these emissions fall onto the surrounding land and run off into water, or fall onto surrounding water directly. For example, approximately one third of the nitrogen that is choking the Chesapeake Bay comes from air deposition. The primary purpose of the Title V permitting program is to reduce Clean Air Act violations and improve enforcement of applicable Clean Air Act requirements that apply to major sources of pollution like the Wheelabrator facility. See New York Public Interest Research Group v. Whitman, 321 F.3d 316, 320 (2d Cir. 2003).

We appreciate the considerable effort that the Maryland Department of Environment (MDE) has made to organize and explain the requirements for this facility, and to make emission limitations and monitoring methods reasonably transparent for the public. Our specific comments are as follows:

I. The draft permit illegally weakens the prevention of significant deterioration pounds per hour limits for carbon monoxide and nitrogen dioxide.

The draft permit illegally weakens the prevention of significant deterioration (PSD) pounds per hour limits for carbon monoxide (CO) and nitrogen dioxide (NO₂) by allowing Wheelabrator to demonstrate compliance with a 24-hour rolling average. Expanding the time period for demonstrating compliance from one hour to a 24-hour average weakens the emission limit in violation of section 116 and Title V of the Clean Air Act.

Section 116 prohibits states from enforcing emission standards or limits that are less stringent than its state implementation plan (SIP). 42 U.S.C. § 7416. The terms “emission

limitation” and emission standard” are defined broadly, and include any “requirement established by the State or Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard” *Id.* § 7602(k). PSD permits in Maryland are issued pursuant to requirements established in Maryland’s SIP. *See* Md. Code Ann. § 26.11.02; 40 C.F.R. § 52.1070(c).

Thus, MDE may not weaken emission limits in a PSD permit unless EPA approves a SIP amendment that reflects the less stringent limits. 42 U.S.C. § 7416; *Duquesne Light Co. v. U.S. Env’tl. Prot. Agency*, 698 F.2d 456, 468 n. 12 (D.C. Cir. 1983). Furthermore, Title V states that operating permits must include all applicable Clean Air Act requirements. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a).

Wheelabrator must comply with PSD limits for CO and NO₂ *every hour*. Md. Dep’t of the Env’t, BRESCO Limited Partnership Prevention of Significant Deterioration Approval (PSD 83-101) (Feb. 21, 1986) [hereinafter 1986 PSD Permit]. However, the draft permit allows Wheelabrator to demonstrate compliance with the CO and NO₂ hourly limits with a 24-hour rolling average. Md. Dep’t of the Env’t, Wheelabrator Baltimore, L.P. Draft Part 70 Operating Permit (No. 24-510-01886) 34 (Jan. 30, 2009) [hereinafter Wheelabrator Draft Permit].

Commenters concede that MDE may authorize Wheelabrator to demonstrate compliance with CO and NO₂ PSD emission limits with 3 hour, and perhaps 9 hour, averages because the conditions to the 1986 PSD Permit state that “[c]ompliance shall be determined by the average of not less than 3 test runs nor more than 9 test runs.” 1986 PSD Permit, at 2. A “test run” is approximately one hour. *See, e.g.*, 40 C.F.R. § 60.8(f) (noting that “[e]ach run shall be conducted for the time and under the conditions specified in the applicable standard.”). The PSD Permit establishes hourly limits for CO and NO₂. Thus, the 1986 PSD Permit makes it clear that compliance may not be averaged over a period greater than nine hours of operation.

MDE may not use Title V as a vehicle to weaken emission limits established in a PSD permit issued pursuant to the SIP. There is no question that expanding the averaging period for determining compliance from nine hours to 24 hours authorizes an emissions increase when compared to the hourly emission limits established in the PSD permit. For example, suppose Wheelabrator averaged 330 pounds an hour of NO_x over one nine hour period and 270 pounds per hour over the next fifteen hours. Under the 1986 PSD Permit, the facility would have exceeded its emission limit. In contrast, the draft Title V permit would excuse the higher emissions by allowing them to be offset over a much longer time period.

In conclusion, the draft permit authorizes emission limits for CO and NO₂ that are less stringent than the current Maryland SIP, and the draft permit fails to identify all existing Clean Air Act requirements that apply to the Wheelabrator facility. MDE has revised the initial draft permit to require compliance with the sulfur dioxide (SO₂) hourly PSD limit be based on a 3 hour rolling average in response to our initial comments (Attachment A). Wheelabrator Draft Permit, at 34. It is unclear why MDE did not revise the compliance requirements for CO and NO₂.

II. The methodology for demonstrating compliance with the PSD pounds per hour limits for SO₂, CO, and NO₂ must be included in the Title V permit.

We appreciate the efforts made by MDE to clarify that the Wheelabrator facility must demonstrate compliance with the PSD hourly mass limits in response to our initial comments. However, the draft Title V permit does not include specific monitoring requirements to ensure compliance. See Wheelabrator Draft Permit, at 37. Although the draft permit states that Wheelabrator “shall continuously monitor pollutants and other parameters necessary to calculate the pounds per hour PSD limits,” it does not include the specific methodology to show Wheelabrator meets the PSD hourly limits it is subject to. *Id.* (noting only that “[t]he methodology for calculating the lbs/hr emissions shall be approved by the Department”). The specific method Wheelabrator uses to convert CEM data pertaining to volume of these pollutants to an hourly mass emission rate should be included in the Title V permit.

Title V states that operating permits “shall set forth ... monitoring ... requirements sufficient to assure compliance with the permit terms and conditions” 42 U.S.C. §7661c(c). Title V does not allow states to issue a permit with emission limits without monitoring requirements, on the promise that monitoring methods will be specified at some future date. Commenters note that our initial comments raising the lack of monitoring for short term emission limits were filed on February 7, 2008. MDE has had over a year to resolve any disputes with Wheelabrator over monitoring methods.

MDE’s failure to decide this issue is even more egregious, since the solution is obvious: Wheelabrator must install and use a flow monitor to measure the volume of gas flow, so that the concentration of the pollutants subject to mass limits can be converted to the mass measurements required to determine compliance. In fact, Wheelabrator’s compliance certification indicates that the company is already using flow monitoring to measure mass emissions of NO_x. See Attachment B (noting that the NO_x pounds per hour calculation is determined by the following formula: $\text{CEM ppm @ 7\%} = (\text{ppm@7\%/1000000}) * (\text{Airflow} * (20.9 - \text{O}_2\%)/13.9) * 60 * (\text{Mol. Wt./385})$). MDE must specify a monitoring method to assure compliance with short term mass emission limits for SO₂, CO, and NO₂ in the Title V permit.

III. The draft permit does not include monitoring requirements that ensure compliance with short term emission limits for several pollutants.

The Clean Air Act requires that “each permit issued under [Title V] shall set forth ... monitoring ... requirements sufficient to assure compliance with the permit terms and conditions.” 42 U.S.C. §7661c(c). On August 19, 2008, the D.C. Circuit Court of Appeals struck down an EPA rule that would have prohibited MDE and other state and local authorities from adding monitoring provisions to Title V permits if needed to “assure compliance.” See *Sierra Club v. U.S. Envtl. Prot. Agency*, 536 F.3d 673 (D.C. Cir. 2008). The opinion emphasized the statutory duty to include adequate monitoring in Title V permits, noting that “[b]y its terms, this mandate means that a monitoring requirement insufficient ‘to assure compliance’ with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards.” *Id.* at 677.

The D.C. Circuit opinion makes clear that Title V Permits must include monitoring requirements that assure compliance with emission limits. The Court specifically noted that annual testing is unlikely to assure compliance with a short term emission limit, and found that state permitting authorities have a statutory duty to include monitoring requirements that ensure compliance with emission limits in Title V operating permits. See id. at 675. In other words, the frequency of monitoring must bear some relationship to the averaging time used to determine compliance.

The draft permit, however, fails to include sufficient monitoring for several pollutants. Wheelabrator must comply with short term emission limits for particulate matter, mercury, cadmium, lead, hydrogen chloride, and dioxins/furans. See Wheelabrator Draft Permit, at 43–45. However, it appears that Wheelabrator is only required to conduct an annual stack test to determine compliance with these emission limits. Id. An annual stack test is clearly insufficient to ensure that Wheelabrator is complying with short term emission limits for toxic pollutants.

For example, annual mercury emissions from the Wheelabrator swing sharply from year to year. In 2006, the Wheelabrator facility reported releasing 243 pounds of mercury. See Attachment B. In 2007, however, Wheelabrator reported releasing 35 pounds. Id. This dramatic difference in reported mercury emissions underscores the need for continuous monitoring.

The Title V permit should require continuous emissions monitoring (CEMs) for mercury to ensure Wheelabrator is meeting mercury limits. Mercury CEMs is an off-the-shelf technology that is widely available. MDE should require a particulate matter CEMs to determine compliance with short term particulate matter emission limits. In addition, a particulate matter CEMs can also be used to monitor emissions of other heavy metals, such as cadmium and lead. Where continuous monitoring is not available, the Wheelabrator permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance. To the extent there are other emission limits in the draft permit that do not have adequate monitoring, these provisions would also violate the Clean Air Act.

IV. Wheelabrator does not appear to be operating its pollution controls for nitrogen oxides (NOx) in a manner that achieves maximum emissions reductions.

According to emissions data, it appears that Wheelabrator is achieving less than a 10% reduction in NOx emissions with its selective non-catalytic reduction (SNCR) controls. The Clean Air Act imposes a duty on owners and operators of major sources of air pollution to “maintain and operate any affected facility, including associated *air pollution control equipment* in a manner consistent with *good air pollution control practice for minimizing emissions.*” See 40 C.F.R. §§ 60.11(d); 63.6(e)(1)(i). Federal rules state that a “[d]etermination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.” 40 C.F.R. § 60.11(d).

In 2007, Wheelabrator reported emitting approximately 1,065 tons of NOx. See Attachment B. The facility processed approximately 657,056 tons of refuse that year, and used SNCR to reduce NOx emissions. Id. Using the U.S. Environmental Protection Agency (USEPA) emission factors for mass burn waterwall refuse incinerators, a facility processing the same amount of refuse will emit approximately 1,169 tons of NOx without any pollution controls for NOx. See U.S. Env'tl. Prot. Agency, Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources § 2.1, tbl. 2.1-4 (Oct. 1996), available at <http://www.epa.gov/ttn/chief/ap42/> [hereinafter EPA, AP-42 Emission Factors]. This emission factor is A-rated, which means that USEPA has determined that it yields “excellent” emissions data. Id.

Based on Wheelabrator’s emissions data, it appears that the SNCR is only reducing 104 tons of NOx per year. In other words, Wheelabrator’s pollution controls only reduced NOx emissions by about 9% in 2007. Wheelabrator’s SNCR system performed even worse in 2006—reducing just 24 tons of NOx when reported annual emissions are compared to uncontrolled emissions using USEPA emission estimates. See id.; Attachment B. This represents a reduction in NOx emissions of just 2.0%. Id.

SNCR controls installed on mass burn waterwall incinerators, like the incinerators at the Wheelabrator facility, can reduce NOx emissions substantially. For example, the USEPA states that “[b]ased on analysis of data [available as of 1996] from U.S. MWCs [municipal waste combustors] equipped with SNCR, NOx reductions of 45 percent are achievable.” EPA, AP-42 Emission Factors, § 2.1.4.6. In addition, Wheelabrator claims that its SNCR system can reduce NOx emissions “up to 40%” in its 2006 Title V permit renewal application. Wheelabrator Baltimore, L.P., Part 70 Permit Application for Renewal of Wheelabrator Baltimore, L.P. Permit No. 24-510-01886 33 (Feb. 2006). While we are aware that a variety of factors influence SNCR performance, Wheelabrator should be able to achieve reductions greater than 9.0%.

Thank you for considering our comments.

Sincerely,

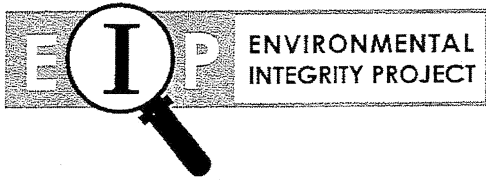
Jennifer Peterson

Jennifer Peterson
Attorney, Environmental Integrity Project
1920 L Street NW, Suite 800
Washington, DC 20036
(202) 236-4449

Eliza Smith Steinmeier
Baltimore Harbor Waterkeeper, Inc.
4901 Springarden Drive, Suite 3A
Baltimore, MD 21209

Andrew Fellows
Chesapeake Program Director, Clean Water Action
711 West 40th St., Suite 209
Baltimore, MD 21211

Attachment A



919 Eighteenth Street NW, Suite 650
Washington, D.C. 20006
p: 202-296-8800 f: 202-296-8822
www.environmentalintegrity.org

February 7, 2008

VIA CERTIFIED MAIL AND ELECTRONIC MAIL

Ms. Shannon Heafey
Air Quality Permits Program
Air and Radiation Management Administration
1800 Washington Blvd., Ste. 720
Baltimore, MD 21230-1720
sheafey@mde.state.md.us

RE: PART 70 OPERATING PERMIT FOR WHEELABRATOR (NO. 24-510-01886)

Dear Ms. Heafey,

Thank you for the opportunity to submit comments on the draft Title V permit for the Wheelabrator municipal waste incinerator in Baltimore, Maryland. We appreciate the considerable effort that the Maryland Department of Environment has made to organize and explain the requirements for this facility, and to make emission limitations and monitoring methods reasonably transparent for the public. Our specific comments are as follows:

a) The December 26, 1995 modification to the initial prevention of significant deterioration (“PSD”) approval appears to be invalid. This modification removed the tonnage restriction on the amount of waste that could be processed annually at the facility based solely on the fact that Maryland was in an attainment area for “inhalable particulate” (“PM10”) at the time. However, the facility was required to demonstrate that increasing the annual throughput¹ would not result in an increase in actual emissions. Md. Code Regs. 26.11.17.02(F)(2)(a). If the modification resulted in a significant emissions increase, the facility would be subject to either a “best available control technology” (“BACT”) or “lowest achievable emission rate” (“LAER”) limit. For example, Baltimore County was designated severe nonattainment for ozone at the time the modification was requested. If the modification resulted in a significant net emissions increase of nitrogen oxide or VOC emissions, the facility would have to meet LAER, as well as off-set increased emissions. There is no evidence from the PSD permit modification that the required analysis was conducted.

After reviewing the 1995 modification, it appears that Bresco, L.P. provided MDE with information demonstrating that the incinerator units could be managed to maintain emission levels below the PSD permit limits while increasing the total amount of waste processed. However, it is not apparent how Bresco, L.P. proposes to constrain emissions while increasing

¹ Although the 1995 modification does not state that MDE is increasing annual throughput, section IV.1 of the draft Title V permit fact sheet says that the original PSD approval was “amended to the current combined total rated capacity of 821,250 tons of refuse per year . . . on December 26, 1995”

the amount of waste processed. These factors (i.e. limited hours of operation) must be clearly identified and made enforceable in the Title V permit.

b) The draft Title V permit modifies the PSD permit in several ways that impermissibly weaken the PSD emission limits. First, the draft Title V permit eliminates the mass limits for nitrogen dioxide ("NO₂") and sulfur dioxide ("SO₂") and purports to replace them with "equivalent" ppm limits.² MDE may not replace a mass PSD limit with a ppm limit without establishing a corresponding limit on flow rate or capacity. The goal of the PSD program is to ensure that a source does not degrade air quality in attainment areas. There is no way to determine whether emissions will violate limits established in the PSD permit under the new ppm limit without identifying flow rate or a capacity limit, and they should be clearly identified in the Title V permit. The PSD mass limits for these pollutants should remain in effect unless the Title V permit is modified to include limits on capacity that ensure that these PSD limits can be met.

Second, the draft Title V permit would effectively amend the PSD permit by authorizing exemptions from PSD limits for emissions during startup, shutdown, and malfunction ("SSM") events. The PSD permit issued in 1986 and amended in 1995 does not include an exception for SSM events; the PSD permit may not be amended through the Title V process to add exceptions not authorized in the original PSD limit. Table IV-1A incorporates Maryland's emission limits for large municipal waste incinerators into the permit. These regulations contain an SSM exemption for NO_x, SO₂ and CO emissions.³ Allowing an SSM exemption significantly weakens the PSD limits and is particularly inappropriate here because the Wheelabrator facility is located in a nonattainment area for both fine particulate matter and ozone.

Finally, Wheelabrator must currently comply with PSD limits for NO₂ and SO₂ *every hour*. The draft Title V permit replaces the PSD permit's pounds per hour emission limit with a limit based on a 24-hour averaging period for both NO₂ and SO₂. Expanding the limit from one hour to a 24-hour average allows for an emissions increase over the PSD limits because the facility is able to violate the limit hourly while complying with the limit over a 24-hour period.

c) MDE does not include compliance assurance monitoring ("CAM") methods required by law for large emission units with pollution control devices for the PSD mass limit for NO₂. The draft Title V permit states that the CAM rule is inapplicable because a continuous emission monitoring system ("CEM") is required to demonstrate compliance with the modified PSD limit of 195 ppm for NO₂. However, the PSD mass limit for NO₂ is still in effect unless the Title V permit is modified to include capacity limits. Thus, MDE must include the required CAM methods to demonstrate compliance with the PSD mass limit. MDE should require use of the NO_x CEMS to determine compliance with the PSD limit.

d) MDE has failed to certify compliance for several regulated pollutants. Table V in the draft Title V permit fact sheet states that stack tests indicate that Wheelabrator is in compliance

² See Table IV-1C(1) (amending NO₂ limit from 298 lbs/hr to 195 ppm and SO₂ limit from 375 lbs/hr to 176 ppm).

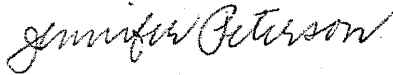
³ Md. Code Regs. 26.11.08.08(A)(3) ("The standards . . . of this regulation apply at all times except during periods of startup, shutdown, or malfunction . . .").

with all applicable emission limits. However, the fact sheet only reports the stack test results for particulate matter, dioxins, mercury, and hydrogen chloride. There is no indication that Wheelabrator has certified compliance for several other pollutants, including SO₂, NO_X, carbon monoxide, cadmium and lead. MDE must certify that Wheelabrator is in compliance with emission limits for these pollutants.

e) The draft Title V permit does not specify the date that Wheelabrator must comply with new federal standards for particulate matter, cadmium, mercury, lead, and dioxin/furan. The permit states that the facility must comply with these standards on the date specified in Maryland's regulations implementing the new limits. However, the federal regulations provide for two different compliance dates. Although Md. Code of Regs. 26.11.08.08(A)(2) states that the compliance date is April 28, 2009, the Title V permit should clearly specify this date to avoid any uncertainty.

Thank you for considering our comments.

Sincerely,



Jennifer Peterson
Counsel
Environmental Integrity Project
1920 L Street NW, Suite 800
Washington, DC 20036
(202) 236-4449

Attachment B

Wheelabrator Annual Emissions Data (2006 – 2007)

Source: Wheelabrator Baltimore, L.P., Annual Title V Permit No. 24-510-01886 Compliance Certification and Emission Certification Reports

Wheabrator Baltimore
Annual Emissions Calculations
Plant:

2006 Data Shaded
Wheabrator Baltimore

	Unit 1	Unit 2	Unit 3	Total
Tons processed	219952	225614.5	225917.2	635,206
Total Operating Hours	7,850	8,018	8,041	23,909
Annual Steam Flow Avg.	184.65	185.37	185.09	
Dioxin Test Air Flow (dscfm)**	94,218	88,495	107,681	
Dioxin Test O ₂ %	10.4	10.2	11.1	
Dioxin Steam Flow Avg. klb/hr	187	187	186	
Natural Gas Usage	5.3E+06	5.5E+06	5.5E+06	1.6E+07

2006 Data Shaded

	Unit 1	Unit 2	Unit 3	Total
Plant Average tons/hr	23.96	21.71	24.73	
	91.78	88.82	99.53	
	2.20	2.67	2.81	

Operating Days		
Unit 1	Unit 2	Unit 3
327	334	335

Plant Average tons/hr
26.6

SO₂
NO_x
CO

Annual CEM Avg.-ppm 7% O ₂			
	Unit 1	Unit 2	Unit 3
	33.8	32.0	32.7
	180.0	182.0	183.0
	7.1	9.0	8.5

Tons per Year			
Unit 1	Unit 2	Unit 3	Plant
92.9	86.3	98.9	278.1
355.7	353.0	398.2	1106.9
8.5	10.6	11.3	30.4

Stack Test Averages
 HCl - ppm 7% Outlet
 HF - ppm 7%***

lbs/hr	
Unit 1	Unit 2
7.12	7.28
0.11	0.10
	5.31
	0.13

Tons per Year	
Unit 1	Unit 2
27.6	28.9
0.4	0.4
	21.2
	0.5
	77.7
	1.3

PM Steam flow Avg klb/hr
 PM - lbs/hr
 PM10 - lbs/hr
 VOC lbs/hr**

lbs/day	
Unit 1	Unit 2
17.76	12.96
9.36	4.32
	18.00
	8.40

Tons per Year	
Unit 1	Unit 2
0.0	0.0
2.9	2.1
1.5	0.7
	3.0
	8.0
	3.6

Metals Steam flow Avg. klb/hr
 Cd - lbs/hr
 Pb - lbs/hr
 Hg - lbs/hr

lbs/day	
Unit 1	Unit 2
0.000448	0.000227
0.007610	0.003660
0.002550	0.005540
	0.022610
	0.0307
	0.543

Tons per Year	
Unit 1	Unit 2
0.0017	0.0009
0.0295	0.0145
0.0099	0.0220
	0.0900
	0.1219
	0.1219

hg lbs/year = 243.75103

Convert from lbs/hr to lbs/day

lbs/day		
Unit 1	Unit 2	Unit 3
187	187	187
575	521	593
2203	2132	2389
53	64	68

SO₂
NO_x
CO

lbs/day	
Unit 1	Unit 2
0.011	0.005
0.183	0.088
0.061	0.133
	0.543

Tons per Year	
Unit 1	Unit 2
0.0017	0.0009
0.0295	0.0145
0.0099	0.0220
	0.0900
	0.1219
	0.1219

Other - lbs/hr
 As - lbs/hr
 Cr - lbs/hr
 Ni - lbs/hr

lbs/day	
Unit 1	Unit 2
0.000081	0.000550
0.000550	0.001113
	0.000113

Tons per Year	
Unit 1	Unit 2
0.000314	0.002132
	0.000438

***Note: For dioxin, VOC, Other metals: 2005 data presented for boiler 1
 2006 data presented for boiler 2
 2004 data presented for boiler 3

*** All HF results are Non Detect. Detection Limit reported as value.
 lbs/hr = CEM ppm @ 7% = (ppm@7%/1000000)*(Airflow*(20.9-0.2%)/13.9)*60*(Mod. Wt./385)
 lbs/day = (lbs/hr*operating hours)/operating days or lbs/hr*24hr/day
 tons/year = (lbs/hr*Operating Hours)/(Annual Steam Flow Avg/ Steam Test Steam Flow Avg))/2000

Example Calculations:

Wheelerlabrator Baltimore

Annual Emissions Calculations

Plant:

Tons processed
 Total Operating Hours
 Annual Steam Flow Avg.
 Dioxin Test Air Flow (discfm)**
 Dioxin Test O2 %
 Dioxin Steam Flow Avg. klb/hr
 Natural Gas Usage

2007 Data Shaded

Wheelerlabrator Baltimore

Unit 1	Unit 2	Unit 3	Total
213716.7	221499.3	221839.7	657,056
7,596	7,872	7,884	23,352
184	192	186	
94,218	88,495	92,218	
10.4	10.2	9	
187	187	189	
4.8E+06	4.9E+06	5.0E+06	1.5E+07

Plant Average
 tons/hr
 28.1

Ops Stats
 Ops Stats
 Ops Stats
 Stack Test
 Stack Test
 Stack Test
 Ops Stats

Operating Days		
Unit 1	Unit 2	Unit 3
316	328	329

SO2
 NOx
 CO

Unit 1	Unit 2	Unit 3
23.61	24.43	26.42
89.74	84.43	100.11
2.45	3.68	2.65

Annual CEM Avg.-ppm 7% O2	Unit 1	Unit 2	Unit 3
33.3	36.0	33.6	
176	173	177	
7.9	12.4	7.7	

CEMS
 CEMS
 CEMS

Stack Test Averages

HCl - ppm 7% Outlet
 HF - ppm 7%***

lbs/hr	Unit 1	Unit 2	Unit 3
7.04	7.28	5.52	
0.18	0.15	0.18	

Stack Test
 Stack Test

PM Steam flow Avg klb/hr
 PM - lbs/hr
 PM10 - lbs/hr
 VOC lbs/hr**

lbs/day	Unit 1	Unit 2	Unit 3
8.88	30.96	17.28	
4.56	4.32	2.88	

Stack Test
 Stack Test
 Stack Test

Metals Steam flow Avg. klb/hr

Cd - lbs/hr
 Pb - lbs/hr
 Hg - lbs/hr

lbs/day	Unit 1	Unit 2	Unit 3
0.002	0.007	0.012	
0.034	0.109	0.199	
0.034	0.034	0.042	

Total lbs/hr
 0.0008
 0.0142
 0.0046

Other - ppm 7%

Mol. Wt	Unit 1	Unit 2	Unit 3
0.00	0.00	0.00	
0.00	0.00	0.00	
0.00	0.00	0.00	

Stack Test
 Stack Test
 Stack Test

Other - lbs/hr
 As - lbs/hr
 Cr - lbs/hr
 Ni - lbs/hr

lbs/day	Unit 1	Unit 2	Unit 3
0.00	0.00	0.00	
0.00	0.00	0.00	
0.00	0.00	0.00	

Stack Test
 Stack Test
 Stack Test

**Note: For dioxin, VOC, Other metals: 2005 data presented for boiler 1
 2006 data presented for boiler 2
 2007 data presented for boiler 3

*** All HF results are Non Detect. Detection Limit reported as value.
 CEM ppm @ 7% = (ppm@7%/1000000)*(Airflow*(20.9-O2%/13.9)*60*(Mol. Wt./385)) = lbs/hr

Example Calculations:

lbs/hr = (lbs/hr*Operating Hours*(Annual Steam Flow Avg/ Steam Test Steam Flow Avg))/2000 = tons/year

Tons per Year		
Unit 1	Unit 2	Unit 3
88.4	98.6	102.4
335.9	341.0	388.0
9.2	14.9	10.3
		34.3

Tons per Year		
Unit 1	Unit 2	Unit 3
26.3	29.4	21.4
0.7	0.6	0.7
		2.0

Tons per Year		
Unit 1	Unit 2	Unit 3
0.0	0.0	0.0
1.4	5.0	2.8
0.7	0.7	0.5
		1.9

Tons per Year		
Unit 1	Unit 2	Unit 3
0.0003	0.0011	0.0019
0.0052	0.0176	0.0322
0.0053	0.0055	0.0068
		0.0176

hg lbs/year = 35,197.34		
Tons per Year		
Unit 1	Unit 2	Unit 3
0.0	0.0	0.0
0.0	0.0	0.0
0.0	0.0	0.0

Tons per Year		
Unit 1	Unit 2	Unit 3
		0.000630
		0.001800
		0.001259

Appendix C

**MD. DEPT' OF THE ENVIRONMENT, AIR & RADIATION MGMT. ADMIN.,
RESPONSE TO PETITIONERS'
MARCH 9, 2009 COMMENTS**

Date: May 11, 2009



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

MDE

410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Shari T. Wilson
Secretary

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Deputy Secretary

MAY 11 2009

Dear Concerned Citizen:

Thank you for your participation in the Part 70 Operating permit application process for Wheelabrator Baltimore LLC's Baltimore City facility.

Enclosed please find the Department's Response to Comments document, which addresses questions and concerns raised during the hearing and submitted directly to the Department during the comment period. The EPA Petition period expires on July 9, 2009, as listed on the EPA Region III website, <http://www.epa.gov/reg3artd/permitting/petitions3.htm>.

Please feel free to contact me at 410-537-4433 or sheafey@mde.state.md.us with any questions.

Sincerely,

Shannon L. Heafey, Title V Coordinator
Air Quality Permits Program
Air and Radiation Management Administration

SLH/jm

Enclosure

MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE)
AIR AND RADIATION
MANAGEMENT ADMINISTRATION

Wheelabrator Baltimore L.P.
Part 70 Operating Permit Response to Comments

I. Comment: The draft permit illegally weakens the prevention of significant deterioration pounds per hour limits for carbon monoxide and nitrogen dioxide.

MDE Response: MDE disagrees with the comment. Compliance with the emissions standards established in the 1983 PSD approval was to be based on the results of averaging from 3 up to 9 test runs using EPA Reference Method tests. The allowance of up to 9 test runs is a direct acknowledgement that in order to obtain a representative test result for a heterogeneous MSW waste stream, more than the typical three tests runs may be necessary to demonstrate compliance. Although test runs are many times one hour in duration, the EPA Reference Methods does not specify a specific duration. Rather, the goal for testing is to collect a representative sample of stack gases that reflects the emissions from a source, and in the case of an incinerator, a 24 hour period for NOx is a reasonable time period.

The BACT emissions limit for NOx in the 1983 PSD Approval were based on incinerator design combined available emissions data. The BACT analysis determined that no additional post-NOx emissions control devices were warranted. Wheelabrator has routinely demonstrated compliance with the NOx pounds/hour emissions limitation by following the annual stack testing requirement established in the PSD Approval

Because NOx emissions from incinerators are affected by the nitrogen content of the trash, there is a technical justification for establishing a 24 hour averaging period. For example yard waste, especially grass clippings, are high in nitrogen content. Air pollution controls are needed to comply with the NSPS/EG limits. It has been demonstrated that attempts to achieve the NOx limit with use of the NOx control system on a 3-hour average will result in increased levels of ammonia slip that will contribute to visible emissions in violation of Maryland's opacity regulations. The ammonia slip is caused because uncontrolled NOx emissions are constantly changing due to the composition of the municipal waste. The reaction time of NOx control system is not instantaneous, so periods of excess urea may occur, resulting in increased ammonia slip. Wheelabrator became subject to NSPS/EG limits effective in 1997. The NOx limitations were set for a 24 hour basis to be measured with continuous emission monitoring systems.

As mentioned above, Wheelabrator demonstrated compliance with the PSD Approval as required by the Approval by performing stacks tests. When the Company performs stack tests, there is a certain amount of control on the composition of the waste stream to be burned during the test period. With the use of continuous emissions monitors, NOx concentrations are measured at all times. As a consequence, compliance with a short term averaging time is problematic when the nitrogen content in the trash stream is varying in a manner for which the NOx control system cannot adequately respond,

MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE)
AIR AND RADIATION
MANAGEMENT ADMINISTRATION

Wheelabrator Baltimore L.P.
Part 70 Operating Permit Response to Comments

resulting in higher ammonia emissions. This inability to make rapid adjustments is the primary contributor to violations of the visible emissions standards.

Another issue that prevents the setting of hourly emissions standards for CO and to a lesser degree, NO_x, is not allowing the exclusion of periods of start-up, shutdown, and malfunction. The NSPS/EG limit for CO is a 4 hour average and 24 hour average for NO_x; however, the NSPS/EG limits do not apply during startups, shutdowns, and malfunctions. Such exclusion is particularly relevant for municipal incinerators because of the inherent variability of the waste stream. Thus, it would be deemed unreasonable to expect an incinerator to achieve a one hour CO limit that includes SSM periods. Furthermore, the 1983 PSD Approval stated that compliance would be based on the average of 3 up to 9 test runs. Obviously, stacks tests are not performed during periods of startup, shutdown, or malfunction so compliance with the PSD Approval limits were never intended to be demonstrated during periods of SSM.

II. Comment: The methodology for demonstrating compliance with the PSD pounds per hour limits for SO₂, CO, and NO₂ must be included in the Title V permit.

MDE Response: MDE disagrees with the comment. MDE believes that the flexibility allowed by the permit condition to allow for a “methodology for calculating the lbs/hr emissions shall be approved by the Department” still provides for a reasonable level of assurance of compliance with the pounds per hour PSD limits. This flexibility allows for changes in the methodology without requiring the Department to expand resources for revising Part 70 permits.

Currently Wheelabrator measures the air flow at maximum capacity during compliance emissions stack tests. This flow rate is used to calculate the pounds per hour of the pollutants and demonstrate compliance. It is documented that the units at Wheelabrator are routinely operated at full capacity as there is an economic incentive for the company to incinerate as much trash as possible. The times that the incinerator are not operating at full capacity are very minimal and during these times the lbs/hr emissions may be overstated. The Department believes that this is a reasonable approach.

However, if in the future there are significant changes in the operations of the incinerators, the Department will reevaluate whether the current approach remains reasonable and consider other viable alternatives.

One element of the initial Part 70 program was to develop “enhanced monitoring” to demonstrate compliance with Clean Air Act requirements. The EPA proposed enhanced monitoring regulations which pushed sources to install continuous emissions monitoring (CEM) systems. These rules were never finalized because no consensus could be reached

MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE)
AIR AND RADIATION
MANAGEMENT ADMINISTRATION

Wheelabrator Baltimore L.P.
Part 70 Operating Permit Response to Comments

amongst affected and interested parties on the requirement for CEM systems. Ultimately EPA proposed a Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64. The CAM rule does not require CEM systems. Therefore, the Department disagrees with the contention that a continuous flow monitor is necessary in order to have a reasonable level of assurance of compliance with the PSD pounds per hour emissions limits.

III. Comment: The draft permit does not include the monitoring requirements that ensure compliance with short term emission limits for several pollutants.

MDE Response: The Department disagrees with this comment. The EG rules that apply to Wheelabrator specifically require an annual stack test as the method of demonstrating compliance. The rule does allow the source to use CEM systems as an approved alternative to testing. However, the use of CEM systems are still not a requirement.

As mentioned in the prior response, processing Title V permits is not the appropriate mechanism for imposing enhanced monitoring such as CEMs on a source.

In EPA's CAM rule, 40 CFR Part 64, the rule promulgated by EPA to satisfy the Clean Air Act requirement for enhanced monitoring, one of the exemptions to Part 64 applicability is for units that are subject to emission limitations or standards proposed by the Administrator (EPA) after November 15, 1990 pursuant to Section 111 and 112 of the Act. See 40 CFR 64.2(b)(i). The pollutants that you mentioned, PM, mercury, cadmium, lead, hydrogen chloride, and dioxins/furans, all have limitations set under Section 112 of the Act. The NSPS/Emissions Guideline regulations for municipal incinerators have sufficient testing, monitoring, record keeping, and reporting requirements so no additional TMRR needs to be established under the authority of periodic monitoring.

IV. Comment: Wheelabrator does not appear to be operating its pollution controls for (NOx) in a manner that achieves maximum emissions reductions.

MDE Response: The Title V permit identifies all requirements of the Clean Air Act that apply to the affected source. Consistent with the CAA and all applicable federal regulations, there are no requirements mandating the installation of a NOx control system that must satisfy a minimum NOx performance requirement. If such a rule existed, it would have been included in the permit. However, the federal EG rule does establish a NOx limitation in ppm and based on a 24 hour standard. On this basis, it is reasonable to enforce the PSD Approval NOx limitation (expressed in lbs/hr) on a rolling 24 hour basis.

Appendix D

MD. DEPT OF THE ENV'T, BRESCO LIMITED PARTNERSHIP PREVENTION OF
SIGNIFICANT DETERIORATION APPROVAL

Permit No. PSD 83-101

Date: February 21, 1986

POST IN CONSPICUOUS PLACE



DEPARTMENT OF HEALTH AND MENTAL HYGIENE
OFFICE OF ENVIRONMENTAL PROGRAMS
201 W. PRESTON STREET
BALTIMORE, MARYLAND 21201

Adele Wilzack, R.N., M.S.
Secretary

William M. Eichbaum
Assistant Secretary for
Environmental Programs

Prevention of Significant Deterioration Approval
 Operating Permit
 DHS Facility Permit


AIR MANAGEMENT ADMINISTRATION
 PERMIT NO. PSD 83-01 Date Issued February 21, 1986
In accordance with
COMAR 10.18.02.03D
 PERMIT FEE NONE Expiration Date _____

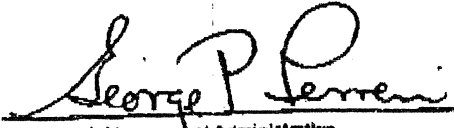
LEGAL OWNER & ADDRESS	SITE
BRESCO Limited Partnership 1801 Old Annapolis Road Baltimore, MD 21230	Same Baltimore City Premise #2376

INSTALLATION DESCRIPTION

One Wheelabrator-Frye three furnace waterwall incinerator with a combined maximum rated capacity of 2,250 tons of refuse per day.

This approval replaces the approval issued on April 29, 1985. The BRESCO Limited Partnership is authorized to operate the Southwest Resource Recovery Facility in accordance with the specific conditions (emission limitations, monitoring and testing requirements) established in Part I and the general conditions set forth in Part II herein.


 Administrator, Engineering and Enforcement Program


 Director, Air Management Administration

**Conditions to PSD Approval No. 83-01
BRESKO Limited Partnership**

Revised February 21, 1986

Part I - Specific Conditions

1. Emissions shall not exceed the limitations specified below:

SO ₂ :	375 lbs/hr. and 1,478 tons/year
CO:	121 lbs/hr. and 477 tons/year
NO ₂ :	298 lbs/hr. and 1,176 tons/year
Fluorides:	12 lbs/hr. and 47 tons/year

2. Emission testing shall be accomplished for each pollutant listed in Number 1 of this part in accordance with Part II General Conditions Number 4 of this permit. The test methods shall be as specified in the Department's TM 83-05.
3. Compliance shall be determined by the average of not less than 3 test runs nor more than 9 test runs. These shall be done while the incinerator is operating within 10% of design capacity.
4. The Company shall develop procedures to ensure that only acceptable waste as defined in Appendix A of the PSD application are incinerated. The procedures shall be submitted to the Department for approval not later than 90 days before the estimated start-up date of the incinerator. Use of these procedures shall be an enforceable requirement of this Approval.
5. The start-up fuel for the incinerator shall be natural gas. The incinerator shall not exceed a fuel consumption rate of 2.7×10^6 ft³ of natural gas in any one-year period.
6. The amount of refuse processed by the facility shall not exceed 740,000 tons in any one-year period. The Company shall maintain records documenting the amount of refuse processed in accordance with Part II - General Conditions Number 5 of this Approval. *modified in 95*

Part II - General Conditions

1. Within ten (10) days after receiving this Approval, the Company shall notify the Department in writing of the estimated start-up date.
2. The Company shall notify the Department of the actual date on which operation is to commence at least fifteen (15) days, but not more than thirty (30) days prior to such date. This notice shall include an application for a temporary permit to operate and a tentative date for emission testing as described in Part I - Specific Conditions Number 2. Upon review and approval of the application, the Department will issue a renewable 90-day temporary operating permit. This temporary operating permit period will allow the Company to solve operational problems such that the testing performed to demonstrate compliance with applicable regulations will be representative of actual operating conditions.

Conditions to PSD Approval No. 83-01
BRESCO Limited Partnership

Part II - General Conditions (continued)

3. A compliance test shall be performed at each emission point for which an emission test requirement is established in this Approval to determine compliance with the emission limits contained herein within sixty (60) days after achieving the maximum production rate but in no event later than 180 days after start up of the facility. The Company shall notify the Department in writing of the actual test date at least twenty (20) days prior to such tests. Compliance test results shall be reported to the Department in writing within forty-five (45) days after test completion in conformance with the test report format enclosed with this Approval.

4. The incinerator shall be designed and constructed so as to allow emissions testing using the methods prescribed herein upon reasonable notice.

5. The Company shall retain records of all emission data and operating parameters required to be monitored by the terms of this Approval for a period of two (2) years.

6. If, for any reason, the Company does not comply or will not be able to comply with the emission limitations or other conditions specified in this Approval, the Company shall provide the Department with the following information as soon as possible but no later than five (5) days after such conditions become known to the Company:

- (a) description of non-compliance;
- (b) cause of non-compliance;
- (c) anticipated time the non-compliance is expected to continue or, if corrected, the actual duration of non-compliance;
- (d) steps taken to minimize or eliminate the non-compliance; and
- (e) steps taken to prevent recurrence of the non-compliance.

Submittal of this report does not constitute a waiver of the emission limitations or other conditions of this Approval nor does it in any way restrict the Department's authority to enforce the conditions.

7. The incinerator is to be designed, constructed, and operated in strict accordance with Approval specifications. Any change in those conditions which may increase emissions or their air quality impact shall be reported to the Department within five (5) days after such change occurs.

8. This Approval shall become invalid if construction of the incinerator is discontinued for a period of eighteen (18) months or more or is not completed within a reasonable time period.

9. In the event of any change in control of ownership, the Company shall notify the succeeding owner of the existence of this Approval by letter and send a copy of that letter to the Department.

Conditions to PSD Approval No. 83-01
BRESKO Limited Partnership

10. All notifications and reports required by this Approval shall be submitted to:

Administrator,
Engineering and Enforcement Program
Air Management Administration
Office of Environmental Programs
201 West Preston Street
Baltimore, Maryland 21201

11. The conditions of this Approval are severable, and if any provision of this Approval or the application of any provision of this Approval to any circumstances is held invalid, the application of that provision to other circumstances and the remainder of this Approval shall not be affected thereby.

CERTIFICATE OF SERVICE

I declare under penalty of perjury under the laws of the United States that I have provided copies of the foregoing Petition to persons or entities below via certified mail on May 22, 2009:

Administrator Lisa P. Jackson
U.S. Environmental Protection Agency
Ariel Rios Building, Mail Code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

U.S. Environmental Protection Agency
Attn: Air Permit Section Chief, Region III
1650 Arch Street, Mail Code 3AP00
Philadelphia, PA 19103-2029

George (Tad) Aburn, Director
Air & Radiation Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Shari Wilson, Secretary
Maryland Department of the Environment
4 Liberty Lane West
Hampton, NH 03842

Mark Weidman, President
Wheelabrator Technologies, Inc.
4 Liberty Lane West
Hampton, NH 03842

Mark Santella, Regional VP
Wheelabrator Technologies, Inc.
1801 Annapolis Road
Baltimore, MD 21230

Registered Agent
Wheelabrator Baltimore, L.P.
The Corporation Trust Incorporated
300 E Lombard Street
Baltimore, MD 21202

Christopher Leyen, Plant Manager
Wheelabrator Baltimore, L.P.
1801 Annapolis Road
Baltimore, MD 21230


Jennifer Peterson