KEEP PERMIT AT SITE **CONTROL NO. B- 05965**

Larry Hogan
Governor

State of Maryland

Ben Grumbles
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit

Part 70
[X] Operating Permit

PERMIT NO. 24-510-1886

DATE ISSUED NOV - 5 2019

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE August 31, 2024

LEGAL OWNER & ADDRESS

Wheelabrator Baltimore, LP
1801 Annapolis Rd.
Baltimore, MD 21230
Attn: Mr. Austin Pritchard, Plant Manager

SITE

Wheelabrator Baltimore, LP
1801 Annapolis Rd.
Baltimore, MD 21230
AI #472

SOURCE DESCRIPTION

Renewal Part 70 Permit to Operate for one Municipal Waste Combustor.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Administration

WHEELABRATOR BALTIMORE, L.P.
1801 ANNAPOLIS ROAD
BALTIMORE, MD 21230
PART 70 OPERATING PERMIT NO. 24-510-1886

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Wheelabrator Baltimore, L.P. (the "Company"), formerly known as Baltimore RESCO Company, L.P., operates a municipal solid waste resource recovery facility (SIC Code 4953). The facility consists of three large mass burn waterwall municipal waste combustors (MWC) each rated at 750 tons per day (TPD) yielding a facility wide capacity of 2,250 TPD. The steam that is generated by the MWCs is either sold to a steam distribution system or used to produce electricity via an on-site steam turbine.

Combustion gases are exhausted through a stack (Emission Point EP1) that contains three flues, one for each of the three MWCs. Each MWC train is equipped with an urea injection selective non-catalytic reduction (SNCR) system to control NOx emissions, a "slaked lime" spray dryer absorber (SDA) system to control acid gas emissions, an activated carbon injection system for mercury and dioxin/furan removal, and a four field electrostatic precipitator (ESP) to remove particulate matter and metals from the exhaust stream. Each stack flue is equipped with a continuous opacity monitoring system (COMS) and continuous emission monitoring systems (CEMS) for sulfur dioxide (SO2), nitrogen oxides (NOx), and carbon monoxide (CO), as well as oxygen (O2) and carbon dioxide (CO2) to monitor stack gas dilution. Additionally, SO2 and O2 CEMS are located upstream of control devices for determining percent reduction of SO2.

Three wet scrubbers are used to control particulate matter from the ash handling areas. One wet scrubber controls particulate emissions from the ash handling area vent. The second wet scrubber is used to control particulate matter from the ash loadout area vent. A third wet scrubber is used to control particulate emissions from the ash trommel area vent. All three wet scrubbers are operated on an as-needed basis to ensure that particulate matter is controlled from ash handling areas.

Other registered equipment at this facility include three (3) lime storage silos equipped with a common bin vent filter, and one (1) activated carbon storage silo equipped with a bin vent bag filter. Both silos dispense their respective materials into a closed system that minimizes the potential for fugitive emissions.

The ash handling areas and the storage silos have a potential to emit for particulate matter of less than 1 ton per year. Consequently, for the purposes of the Company's Part 70 permit, these sources have been listed in the insignificant activities section of the permit.

On November 1, 2011, the Department revised and reissued the Title V operating permit for the Wheelabrator Baltimore, L.P. facility. The revision was in response to the Environmental Protection Agency's Order which partially granted and partially denied the citizen petition for EPA to object to the issuance of the operating permit. In the reissued permit, the Department revised the averaging time for Prevention of Significant Deterioration (PSD) limits for the emissions of nitrogen oxides (NOx), sulfur dioxide (SO2) and carbon monoxide (CO) so that they are equivalent to times established in the original PSD permit issued in 1983 and amended in February 1986.

2. FACILITY INVENTORY LIST

The Company has identified the following emission units at the Baltimore City facility as being subject to Title V permitting requirements and having applicable requirements.

Table 2: Emission Unit Identification

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU - 1	510-1886-2-0255	One (1) 750 TPD Wheelabrator-Frye mass burn waterwall municipal waste combustor equipped with SNCR, SDA, ESP and activated carbon injection systems.	May 1985
EU - 2	510-1886-2-0256	One (1) 750 TPD Wheelabrator-Frye mass burn waterwall municipal waste combustor equipped with SNCR, SDA, ESP and activated carbon injection systems.	May 1985
EU - 3	510-1886-2-0257	One (1) 750 TPD Wheelabrator-Frye mass burn waterwall municipal waste combustor equipped with SNCR, SDA, ESP and activated carbon injection systems.	May 1985

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification

SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This

information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a

source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to

construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.
(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;

(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the

application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the

pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the Reference of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The Reference of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date

specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

(1) Familiar with each source for which the certifications forms are submitted, and

(2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

(1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,
(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.155.

e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. **[Reference: COMAR 26.11.03.06C(5)(g)]**

Table IV – 1	
1.0	**Emissions Unit Number(s): EU-1 thru EU-3, Municipal Waste Combustors** Three (3) identical waterwall municipal waste combustors each rated at 750 tons per day. Each unit is equipped with the following air pollution control devices: a Selective Non-Catalytic Reduction (SNCR) system for NOx removal; a “slaked lime” spray dryer absorber (SDA) system for acid gas removal; an activated carbon injection system for the removal of mercury and dioxins/furans; a four field electrostatic precipitator for control of particulate matter and metals in the flue gas. (MDE Registration No. 510-1886-2-0255, 2-0256, and 2-0257)
1.1	**Applicable Standards/Limits:** A. **Existing Large MWC Emission Limits** 1. The Permittee shall comply with the existing Large MWC emissions limits and operational standards found in Table IV-1A that follows this table. **[Reference: COMAR 26.11.08.08A(1)]** 2. The standards in COMAR 26.11.08.08A(2) apply at all times except during periods of startup, shutdown, or malfunction as

Table IV – 1

provided in 40 CFR §60.58b(a). **[Reference: COMAR 26.11.08.08A(3)]**

a. Duration of start-up, shutdown, or malfunction period are limited to 3 hours per occurrence, except for carbon monoxide, where the malfunction period may be extended to 15 hours when loss of boiler water level control (e.g., tube failure) or combustion air control (e.g. loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction; **[Reference: COMAR 26.11.08.08A(3), 40 CFR §60.58b(a)(1)(i) and (1)(iii)]**

b. The start-up period commences when the facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the facility is combusting a fossil fuel or any other auxiliary fuel, and no municipal waste is being combusted; **[Reference: COMAR 26.11.08.08A(3) and 40 CFR §60.58b(a)(1)(i)]**

c. To allow for waste to be emptied from the throat of the feeding chute, the shutdown period shall begin 30 minutes after the chute to the loading hopper of the combustion train is closed. **[Reference: COMAR 26.11.02.02H]**

B. <u>Incinerator Operator Training</u>

1. **COMAR 26.11.08.09B,** <u>Certification Requirement</u>. "A person may not operate or allow an incinerator to be operated unless the owner certifies to the Department on a form approved by the Department that the incinerator operator:

   a. Has completed an initial training course approved by the Department which meets the requirements of COMAR 26.11.08.09D;

   b. Annually, after initial certification, completes a review course approved by the Department; and

   c. Is present at all times whenever the incinerator is in operation."

Table IV – 1

2. **COMAR 26.11.08.09D(1),** Training Course for Operators of Municipal Waste Combustors, Sewage Sludge Incinerators, and Hazardous Waste Incinerators. "For any incinerator operator who operates a municipal waste combustor (MWC), the training course shall address the following subjects in detail:

   a. Overall operation, maintenance, and performance of the facility;

   b. Start-up and shut-down of the facility;

   c. Applicable federal, State, and local environmental regulations, and sanctions for violations;

   d. Policies and procedures for proper and safe plant operation;

   e. Maintaining records of facility operations;

   f. Actions to correct upsets or emergencies;

   g. Control room operations;

   h. Ash handling and disposal;

   i. Combustion theory;

   j. Air pollution control technology;

   k. Continuous emission monitors and their calibration, and quality assurance requirements."

3. **COMAR 26.11.08.09D(2),** Training Course for Operators of Municipal Waste Combustors, Sewage Sludge Incinerators, and Hazardous Waste Incinerators. "For the operator of any municipal waste combustor (MWC), completing a training course means:

   a. Completing an initial training course approved by the Department of at least 5 days (40 hours) duration; and

   b. Passing a written test approved by the Department."

Table IV – 1

4. **COMAR 26.11.08.09D(4),** Training Course for Operators of Municipal Waste Combustors, Sewage Sludge Incinerators, and Hazardous Waste Incinerators. "The certified operator shall, after initial training, complete and pass an annual review course approved by the Department of at least 1 day (8 hours) duration."

5. **COMAR 26.11.08.09H,** Operations and Maintenance Manual.

   a. "The owner or operator of a large MWC shall develop and maintain on-site, an operations and maintenance manual that contains, at a minimum, all of the course content requirements in COMAR 26.11.08.09D(1) and in 40 CFR §60.54b(e)."

   b. "The operations and maintenance manual shall be updated annually."

C. PSD Approval 83-01 (Feb. 21, 1986)

1. The Permittee shall not exceed the facility-wide emissions limitations specified below:

   SO_2: 375 lbs./hr. and 1,478 tons/year
   CO: 121 lbs./hr. and 477 tons/year
   NOx: 298 lbs./hr. and 1,176 tons/year
   Fluorides: 12 lbs./hr. and 47 tons/year
   [Reference: PSD Approval 83-01, Part I, Condition (1)]

2. Compliance with the facility wide lb/hr PSD emission limit shall be determined as follows:

   a. SO_2, CO and NOx: 8 hour block average. A valid facility eight hour block average is based on a minimum of 6 hours of total facility hourly data.

   b. Fluorides: the average of three test runs using EPA Reference Method 13B, 26A, or equivalent

   c. All emissions associated with startup, shutdown, and malfunction episodes are included in the pounds per hour standard. **[Reference: COMAR 26.11.02.02H]**

Table IV – 1

Note: AFSF factors are derived from stack tests or an alternative methodology approved by the Department.

3. The tons per year PSD emission limits are a 12-month composite (rolling monthly) and includes all emissions associated with startup, shutdown, and malfunction episodes. **[Reference: COMAR 26.11.02.02H]**
4. The Permittee shall develop and submit to the Department for approval, procedures to ensure that only acceptable wastes as defined in Appendix A of the PSD application are incinerated. **[Reference: PSD Approval 83-01 Part I, Condition (4)]**

5. The start-up fuel for the incinerator shall be natural gas. The incinerator shall not exceed a fuel consumption rate of 2.7×10^7 ft.^{3} of natural gas in any one-year period. **[Reference: PSD Approval 83-01 Part I, Condition (5)]**

D. NSINA Approval No. 83-01 (Feb. 21, 1986)

Each furnace shall be equipped with electrostatic precipitators that shall be operated such that the particulate grain loading at the outlet ends of the ESP complies with the 0.017 gr/dscf particulate matter emission standard for large MWCs. **[Reference: NSINA Approval 83-01 Condition (3)]**

Note: Compliance with the existing Large MWC particulate emission limit of 25 mg/dscm (0.01093 gr/dscf) and testing, recordkeeping and monitoring requirements under COMAR 26.11.08.08A(2) assures compliance with the NSINA limit.

E. Visible Emissions

No emissions, other than water in an uncombined form, visible to human observers. The no visible emission requirement does not apply to emissions during start-up, or adjustments, or occasional cleaning of control equipment, if: (1) the visible emissions are not greater than 40 percent opacity; and (2) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. **[Reference: COMAR 26.11.08.04B&C]**

1.2 **Testing Requirements:**

A. Existing Large MWC Emission Limits

The Permittee shall comply with the testing requirements for the emissions and operational parameters in accordance with the test methods and specified frequencies referenced in Table IV-1A for existing large MWCs no less than 9 months and no more than 15 months following the previous test. **[Reference: COMAR 26.11.08.08A(2)]**

B. Incinerator Operator Training

No emissions testing requirements under this paragraph.

C. PSD Approval 83-01

The Permittee shall conduct annual testing for fluorides no less than 9 months and no more than 15 months following the previous test using EPA Reference Method 13B or 26A or equivalent approved by the Department. Testing may be combined with the existing large MWC annual HCl testing. **[Reference COMAR 26.11.03.06C(3)]**

D. NSINA Approval 83-01

The Permittee shall perform annual testing for particulate emissions in accordance with the standards for existing large MWCs as provided in COMAR 26.11.08.08A(2). **[Reference: COMAR 26.11.03.06C(3)]**

Note: The NSINA particulate emissions standard is subsumed by the particulate emissions standard of COMAR 26.11.08.08A(2).

E. Visible Emissions

See Monitoring Requirements

1.3 **Monitoring Requirements:**

A. Existing Large MWC Emission Limits

1. The Permittee shall:

a. Install, calibrate, operate and maintain continuous emission monitors for carbon monoxide, oxygen, opacity, oxides of nitrogen, and sulfur dioxide;

b. Locate monitors downstream of the final air pollution control device to measure concentrations of oxygen, oxides of nitrogen, sulfur dioxide, and opacity of the exhaust gases; and

c. Install, operate, and maintain at a minimum, one temperature monitor to measure the temperature of the flue gas as it enters the particulate matter control device. **[Reference: COMAR 26.11.01.11B(3) and COMAR 26.11.08.08B(1)]**

2. If the percent removal option is to be used to show compliance with regulation COMAR 26.11.08.08B (1)(b), sulfur dioxide and oxygen monitors shall also be located upstream of the pollution control device. Monitors shall be located at the combustor outlet exit to measure concentrations of carbon monoxide. **[Reference: COMAR 26.11.08.08B(2)]**

   Note: *SO_2 and O_2 are measured upstream of the air pollution control device to calculate % removal and CO is measured downstream of air pollution control devices as approved per COMAR 26.11.08.08(B)(4)*

3. The monitors required by COMAR 26.11.08.08B(1)(a) and (b) of this regulation shall meet the installation, certification, reporting, record-keeping, and other requirements of COMAR 26.11.01.10, performance specifications in 40 CFR Part 60, Appendix B, the quality assurance procedures in 40 CFR Part 60, Appendix F, specifications in 40 CFR Sec. 60.58b, and COMAR 26.11.31. **[Reference: COMAR 26.11.08.08B(3)]**

4. A person shall apply for and receive written approval from the Department before installing any of the monitors required in this chapter. **[Reference: COMAR 26.11.08.08(B)(4)]**

5. During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed. **[Reference: 40 CFR § 60.58b(m)(1)]**

6. An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance tests for mercury emissions and each subsequent performance test for mercury emissions. **[Reference: 40 CFR §60.58b(m)(1)(i)]**

7. An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance tests for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, the owner or operator may elect to apply the same estimated average carbon feed rate from the tested facility for all the similarly designed and operated facilities at the MWC plant. **[Reference: 40 CFR § 60.58b(m)(1)(ii)]**

8. During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate shall be averaged over a block 8-hour period and the 8-hour block average must exceed or equal the level(s) documented during the performance tests specified under 40 CFR 60.58b(m)(1)(i)&(ii) except as specified in §§(m)(2)(i) and §§(m)(2)(ii). **[Reference: 40 CFR §60.58b(m)(2)]**

9. During the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual performance test, no limit is applicable for the average mass carbon feed rate if the provisions of §§(m)(2)(ii) are met. **[Reference: 40 CFR 60.58b(m)(2)(i)]**

10. The limit for average mass carbon feed rate may be waived in accordance with permission granted by the Administer for the purpose of evaluating system performance, testing new technology or control technology, diagnostic testing or related activities. **[Reference: 40 CFR § 60.58b(m)(2)(ii)]**

B. <u>Incinerator Operator Training</u>

See Record Keeping and Reporting requirements.

C. PSD Approval 83-01

1. The Permittee shall monitor natural gas fuel usage to ensure compliance with the PSD limitation. Total facility fuel usage shall be calculated on a 12 month rolling average basis. [**Reference:** COMAR 26.11.03.06C(3)].

2. The Permittee shall continuously monitor pollutants and other parameters necessary to calculate the pounds per hour PSD limits. The methodology for calculating the lbs/hr emissions shall be as follows:

   Average lbs/hour = (ppm)*(AFSF factor (DSCFH/Klbs))*(actual steam flow (Klbs/hr))*(Conversion Factor), where:

   - ppm = CEM hourly average ppmdv for CO, NOx, and SO_2
   - Stack test air flow to steam flow factor (AFSF) = Dry standard cubic foot per hour air flow per thousand lbs steam (DSCFH/Klb)
   - Actual steam flow (Klbs/hour) = steam flow in thousand pounds per hour
   - Conversion Factor = 1.66E-07 for SO2, 1.194E-07 for NOx, and 7.27E-08 for CO from 40 CFR Part 60 Appendix B Method 19 procedures for converting ppm to lbs/dscf. **[Authority: COMAR 26.11.03.06C(3)]**

Note: The AFSF factors are updated during annual stack testing or an alternative methodology approved by the Department.

D. NSINA Approval 83-01

See Monitoring Requirements for Existing Large MWC Emission Limits.

Note: The NSINA particulate emissions standard is subsumed by the particulate emissions standard of COMAR 26.11.08.08A(2).

E. Visible Emissions

Periodic monitoring shall be done using EPA Reference Method 9 observations on a monthly basis. Observation shall be conducted over a 15-minute period. **[Reference: COMAR 26.11.03.06C(3)]**

1.4 **Record Keeping Requirements:**

A. Existing Large MWC Emission Limits

1. The Permittee shall maintain records in accordance with 40 CFR § 60.59(b) of Subpart Eb, as applicable, except for the siting requirements under §§ 60.59b(a), (b)(5), and (d)(11) of 40 CFR 60 Subpart Eb. **[Reference: COMAR 26.11.08.08C(1)]**

2. Continuous emissions monitoring data reduction and data availability shall be in accordance with COMAR 26.11.01.10. If there is any inconsistency between COMAR 26.11.01.10 and 40 CFR Part 60, the requirements of 40 CFR Part 60 govern. **[Reference: COMAR 26.11.08.08C(2)]**

3. The Permittee shall estimate the total carbon usage of the plant for each calendar quarter by two independent methods as stated in conditions 4 and 5 below. **[Reference: 40 CFR §60.58b(m)(3)]**

4. The Permittee shall estimate total carbon usage at the plant by maintaining records for of the weight of carbon delivered to the plant on a quarterly basis. **[Reference: 40 CFR §60.58b(m)(3)(i)]**

5. The Permittee shall estimate the average carbon mass feed rate for each hour of operation for each affected facility based on the carbon feed system parameters specified during performance testing. The Permittee shall sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter. **[Reference: 40 CFR §60.58b(m)(3)(ii)]**

6. The Permittee shall retain records of quarterly carbon usage using the methods described above for a period of 5 years and make that data available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

B. Incinerator Operator Training

The Permittee shall maintain a copy of a certificate issued by the Department to each incinerator operator who has satisfactorily completed an approved incinerator training course and has passed the

	exit examination. **[Reference: COMAR 26.11.08.09 and COMAR 26.11.03.06C(3)]** **C. <u>PSD Approval 83-01</u>** 1. The Permittee shall retain records of all emissions data and operating parameters and fuel use, as required by the terms of PSD Approval 83-01 for a period of five (5) years. **[Reference: PSD Approval 83-01 Part II Condition (5) and COMAR 26.11.03.06C]** 2. The Permittee shall maintain records of the calculated pounds per hour and the tons per years for a period of 5 years. **[Reference: COMAR 26.11.03.06C]** 3. The Permittee shall maintain a record of the results of the annual stack test for fluorides for a period of 5 years. **[Reference: COMAR 26.11.03.06C]** **D. <u>NSINA Approval 83-01</u>** See Record Keeping Requirements for Existing Large MWC Emission Limits. <u>Note:</u> *The NSINA particulate emissions standard is subsumed by the particulate emissions standard of COMAR 26.11.08.08A(2).* **E. <u>Visible Emission Limit</u>** The Permittee shall maintain records of all Method 9 observation taken to demonstrate compliance with COMAR 26.11.08.04, on-site for a period of at least five (5) years. **[Reference: COMAR 26.11.03.06]**
1.5	**<u>Reporting Requirements</u>:** **A. <u>Existing Large MWC Emission Limits</u>** 1. The Permittee shall submit a quarterly CEM/COM and parameter monitoring data excess emission report to the Department not later than 30-days following each calendar quarter. At a minimum, the report shall include:

a. A listing of the time period, magnitude, and cause of all emissions that exceeded the applicable emission or parameter monitoring standard for the respective emission/parameter averaging time,

b. A listing of all excluded data and the reason for excluding the data,

c. A listing of all the 1-hour average emission concentrations, 1-hour percent reduction data, as applicable, and 1-hour parameter monitoring data for any day that there was either an exceedance of an emission or parameter standard or for any day that the Permittee excluded data. The listing is only required for the respective pollutant or parameter that there was an exceedance for or Permittee excluded data,

d. A listing of time periods (including invalid hourly averages or invalid 6 minute averages for COMs) and cause of all CEM/COM and parameter monitor downtimes,

e. A listing of installation (MWC units) downtime,

f. Daily calibration activities when results exceeded the daily calibration drift limits and the results of all audits performed during the quarter, and

g. A summary of the quarterly totals of excess emissions, installation downtimes, and monitor downtimes. **[Reference COMAR 26.11.01.10D(2), COMAR 26.11.01.11E(2), and COMAR 26.11.03.06C]**

2. A person who owns an existing MWC subject to this regulation shall submit to the Department semi-annual reports that includes the information specified in §§60.59b(g)(1) through (g)(5) of Subpart Eb, as applicable, by August 1st and February 1st for the respective reporting periods. **[Reference: 40 CFR § 60.59b(g)]**

3. A person who owns an existing MWC subject to this regulation shall submit to the Department semi-annual reports that includes the information specified in §§(h)(1) through §§(h)(5) , as applicable, for any recorded pollutant or parameter that does not

comply with the pollutant or parameter limit specified under this subpart by August 1st and February 1st for the respective reporting periods. **[Reference: 40 CFR §60.59b(h)]**

B. Incinerator Operator Training

Record and Notification. Within 10 days after training is complete, the person who conducts an approved incinerator operator training course shall:

a. Notify the Department in writing, of the names, employee identification numbers, and employer of those incinerator operators who have successfully completed the training course; and

b. Provide a certificate to each incinerator operator who has satisfactorily completed the training course and has passed the required examination [**Reference:** COMAR 26.11.08.09G(1) & (2)].

C. PSD Approval 83-01

1. The Permittee shall submit the results of annual fluoride tests along with the other annual emission test results that satisfy COMAR 26.11.08.08C(1). **[Reference: COMAR 26.11.03.06C]**

2. The Permittee shall submit a quarterly excess emission report to the Department not later than 30-days following each calendar quarter. At a minimum, the report shall include:

   a. A listing of the time period, magnitude, and cause of all emissions that exceeded the applicable emission standard for the respective emission averaging time along with causes and corrective actions, and

   b. A listing of all of the 12-month rolling emissions for SO_2, CO, NOx for the quarter. **[Reference: COMAR 26.11.03.06C]**

3. If, for any reason, the Permittee does not comply or will not be able to comply with the emission limitations or other conditions specified in this Approval, the Permittee 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 [**Reference:** PSD Approval 83-01 Part II, Condition (6)]**:** 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 non-compliance; and e. Steps taken to prevent recurrence of the non-compliance. 4. Submittal of this report does not constitute a waiver of the emission limitations or other conditions of this Approval nor does it in anyway restrict the Department's Reference to enforce the conditions. Note: This report applies to noncompliance with PSD Approval 83-01 emission limits and other PSD conditions only. 5. In the event of any change in control of ownership, the Permittee shall notify the succeeding owner of the existence of this Approval by letter and send a copy of that letter to the Department. **[Reference: PSD Approval 83-01 Part II-Condition (9)]** **D. NSINA Approval 83-01** See Reporting Requirements for Existing Large MWC Emission Limits. *<u>Note:</u> The NSINA particulate emissions standard is subsumed by the particulate emissions standard of COMAR 26.11.08.08A(2).* **E. Visible Emission Limit** The Permittee shall report deviations in accordance with Section III, Plant Wide Conditions, Item 4 Report of Excess Emissions and Deviations.

A Permit Shield shall cover the applicable requirements identified for the emission units listed in the table above. Permit shields are granted on an emission unit by emission unit basis.

Table IV-1A

Emission Standards, Performance and Compliance Testing Requirements for Emissions Units 1 thru 3 [Reference: COMAR 26.11.08.08A(2)]

Pollutant/ Parameter	*Emission Standard for a Large MWC* * adjusted to 7 percent oxygen on dry basis.	*Performance and Compliance Test Requirements*
Opacity	10 percent opacity with Continuous Opacity Monitoring System (COMS) based on six minute block averages.	EPA Reference Method 9 and COMS. Applicable test procedures and methods as specified in 40 CFR §60.58b(c); and quality assurance requirements as specified in COMAR 26.11.31.
Particulate Matter	25 mg/dscm* (0.01093 gr/dscf)*	EPA Reference Method 5. Annual test, methods and procedures as specified in 40 CFR §60.58b(c)
SO_2 (Sulfur Dioxide)	29 ppmv* - 24 hr. geometric mean or 75 percent reduction, whichever is less restrictive	CEMS. Applicable test procedures and methods as specified in 40 CFR §60.58b(e).
NOx (Oxides of Nitrogen)	205 ppmv* - 24 hr. arithmetic for Mass burn waterwall MWC.	CEMS. Applicable test procedures and methods as provided in 40 CFR §60.58b(h).
Carbon Monoxide	100 ppmv* - 4 hr. block avg.	CEMS. Methods and procedures as specified in 40 CFR §60.58b(b) and 40 CFR §60.58b(i).
HCl (Hydrogen Chloride)	29 ppmv* or at least 95 percent removal efficiency whichever is less restrictive.	EPA Reference Method 26 or 26A. Annual test except as provided in 40 CFR §60.58b(f). Applicable test procedures and methods as provided in 40 CFR §60.58b(f).

Table IV-1A

Emission Standards, Performance and Compliance Testing Requirements for Emissions Units 1 thru 3 [Reference: COMAR 26.11.08.08A(2)]

Pollutant/ Parameter	*Emission Standard for a Large MWC* * adjusted to 7 percent oxygen on dry basis.	*Performance and Compliance Test Requirements*
Dioxins /Furans	35 ng/dscm* (total mass) for ESP based control device	EPA Reference Method 23. Annual test except as provided in 40 CFR §60.58b(g) (5) (iii) and 40 CFR §60.38b (b). Applicable test procedures and methods as specified in 40 CFR §60.58b(g).
Cd (Cadmium)	35 µg/dscm*	EPA Reference Method 29. Annual test except as provided in 40 CFR §60.58b(d). Applicable test procedures and methods as specified in 40 CFR 60.58b(d).
Pb (Lead)	400 µg/dscm*	EPA Reference Method 29. Annual test except as provided in 40 CFR §60.58b(d). Applicable test procedures and methods as specified in 40 CFR §60.58b(d).
Hg (Mercury)	50 µg/dscm* or 85% reduction by weight applies if less restrictive than the above.	EPA Reference Method 29. Annual test except as provided in 40 CFR §60.58b(d) and (m). Applicable test procedures and methods as specified in 40 CFR §60.58b(d).
Load	Not to exceed 110 percent of maximum load during most recent dioxin/furan performance test during which compliance with the dioxin/furan emission limit is achieved.	Continuous monitoring – 4 hr. block arithmetic average steam load. Applicable test procedures and methods as provided in 40 CFR §60.58b(i)(6) and (8).
Temperature	The maximum particulate matter control device inlet temperature must not exceed by more than 17 degrees Celsius the temperature during the most recent dioxin/furan test demonstrating compliance.	Continuous monitoring. The temperature shall be calculated in 4-hr. block arithmetic averages. Applicable test procedures and methods satisfying the requirements of 40 CFR §60.58b(i) (7) and (9) and exemptions in 40 CFR §60.53b(c).

Table IV-1A

Emission Standards, Performance and Compliance Testing Requirements for Emissions Units 1 thru 3 [Reference: COMAR 26.11.08.08A(2)]

Pollutant/ Parameter	*Emission Standard for a Large MWC* * adjusted to 7 percent oxygen on dry basis.	*Performance and Compliance Test Requirements*
Fugitive Ash Emissions	Visible emissions less than 5 percent of the observation period during ash transfer.	EPA Reference Method 9 observations as specified in 40 CFR §60.58b(k). Annual test. The emission limit excludes visible emissions discharged inside buildings or enclosures of ash conveying systems or during maintenance and repair of ash conveying systems as specified in 40 CFR §60.55b.

*Corrected to 7 percent oxygen on dry basis. If a CO_2 monitor is selected as the diluent monitor, it must meet the requirements of 40 CFR §60.58b(b)(6)

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 1 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving:

Cummins N-855-F Diesel Engine (fire pump) rated at 240 BHP at 2100 RPM, Manufacture Date: October 1983

The installation is subject to the following requirements:

(a) COMAR 26.11.09.05E(2), Emissions During Idle Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(b) COMAR 26.11.09.05E(3), Emissions During Operating Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(c) COMAR 26.11.09.05E(4), Exceptions.

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(A) Engines that are idled continuously when not in service: 30 minutes

(B) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

(d) Requirements from 40 CFR part 63, subpart ZZZZ:

Operation and Maintenance Requirements

(i) The Permittee must comply with the requirements in item 1 of Table 2c to 40 CFR part 63, subpart ZZZZ as follows:

(A) Change oil and filter every 500 hours of operation or annually, whichever comes first.

(B) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

(C) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(D) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(E) The Permittee may petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. **[Reference: 40 CFR §63.6602]**

(ii) The Permittee must be in compliance with the applicable requirements in 40 CFR part 63, subpart ZZZZ at all times. **[Reference: 40 CFR §63.6605(a)]**

(iii) At all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation 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, review of operation and maintenance procedures, review of operation and maintenance

records, and inspection of the source. **[Reference: 40 CFR §63.6605(b)]**

(iv) The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **[Reference: 40 CFR §63.6625(e)(2)]**

(v) The Permittee must install a non-resettable hour meter if one is not already installed. **[Reference: 40 CFR §63.6625(f)]**

(vi) The Permittee must demonstrate continuous compliance with each applicable requirement in Table 2c to 40 CFR part 63, subpart ZZZZ according to methods specified in Table 6 to this subpart. **[Reference: 40 CFR §63.6640(a)]**

Table 6, item 9 (existing emergency stationary RICE ≤500 HP located at a major source of HAPs) specifies that the Permittee must operate and maintain the fire pump engine according to the manufacturer's emission-related operation and maintenance instructions or develop and follow the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **[Reference: 40 CFR Part 63 Subpart ZZZZ Table 6]**

(vii) There is no time limit on the use of emergency stationary RICE in emergency situations. **[Reference: 40 CFR §63.6640(f)(1)]**

(viii) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local

standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. **[Reference: 40 CFR §63.6640(f)(2)(i)]**

(ix) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **[Reference: 40 CFR §63.6640(f)(3)]**

Notification and Reporting Requirements

No notification requirements under 40 CFR §63.6645 or reporting requirements under 40 CFR §63.6650.

Record Keeping Requirements

(i) The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the Permittee's own maintenance plan. **[Reference: 40 CFR §63.6655(e)]**

(ii) The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the Permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. **[Reference: 40 CFR §63.6655(f)]**

(iii) Records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1). **[Reference: 40 CFR §63.6660(a)]**

(iv) As specified in § 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **[Reference: 40 CFR §63.6660(b)]**

(v) The Permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). **[Reference: 40 CFR §63.6660(c)]**

(2) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(3) No. Varies Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

Parts cleaner and related containers are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(i) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(ii) COMAR 26.11.19.09D(3)(a) - (d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(iii) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

(iv) The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(A) Monthly records of the total VOC degreasing materials used; and

(B) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(4) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(5) Containers, reservoirs, or tanks used exclusively for:

(a) ____Dipping operations for applying coatings of natural or synthetic resins that contain no VOC;

(b) ____Dipping operations for coating objects with oils, waxes, or greases, and where no VOC is used;

(c) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(d) No. Varies Storage of lubricating oils;

(e) No. 4 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;

(f) No. 3 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(g) No. Varies The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(6) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(7) ✓ Natural draft hoods or natural draft ventilators that exhaust air pollutants into the ambient air from manufacturing/industrial or commercial processes;

(8) ✓ Laboratory fume hoods and vents;

(9) Any other emissions unit, not listed in this section, with a potential to emit less than the "de minimis" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 4 Storage of silos for lime and activate carbon used as reagents in air pollution control devices.

No. 3 Wet scrubbers used for ventilation of ash handling area, ash load out, and ash trammels area.

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

   A. COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

   B. COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

   C. COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Monitoring Requirements:

   A. The Permittee shall monitor the material in its waste stream in accordance with Department approved procedures to comply with the following waste restrictions:

      i. Municipal Solid Waste may include certain `solid waste generated from industrial, institutional, and commercial facilities such as trimmings, off-specification products, and similar materials. Hazardous wastes, and infectious medical wastes must be excluded.

      ii. Infectious waste may not be stored, burned, or disposed of at this facility; and

      iii. Off-spec and outdated pharmaceuticals may be burned at the facility provided that the burning does not cause a violation of any standard or operating requirement.

3. NOx Requirements for Large Municipal Waste Combustors (Effective: 12/6/18)

   A. COMAR 26.11.08.10A, which requires owners and operators of a Large MWC to minimize NOx emissions by operating and optimizing the use of all installed pollution control technology and combustion

controls consistent with the technological limitations, manufacturers' specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions (as defined in 40 CFR §60.11(d)) for such equipment and the unit at all times the unit is in operation, including periods of startup and shutdown.

B. COMAR 26.11.08.10B, as of May 1, 2019, the owner or operator of a Large MWC shall meet the following applicable NOx emission rates, except for periods of startup and shutdown:

Affected Sources	NO_x 24-hour block average emission rate
Montgomery County Resource Recovery Facility	140 ppmv
Wheelabrator Baltimore Inc.	150 ppmv

C. COMAR 26.11.08.10C, as of May 1, 2020, the owner or operator of a Large MWC shall meet the requirements of §B of this regulation and the following applicable NOx emission rates, except for periods of startup and shutdown:

Affected Sources	NO_x 30-day rolling average emission rate
Montgomery County Resource Recovery Facility	105 ppmv
Wheelabrator Baltimore Inc.	145 ppmv

D. COMAR 26.11.08.10D(2), as of May 1, 2019, a facility-wide NOx emission limit of 252 lbs/hr timed average mass loading over a 24-hour period shall apply during periods of startup and shutdown for Wheelabrator Baltimore Inc.

E. COMAR 26.11.08.10E, Additional NOx Emission Control Requirements.

i. Not later than January 1, 2020, the owner or operator of Wheelabrator Baltimore Inc. shall submit a feasibility analysis for additional control of NOx emissions from the Wheelabrator Baltimore Inc. facility to the Department. This analysis shall be prepared by an independent third party and include the following:

a. A written narrative and schematics detailing existing facility operations, boiler design, NOx control technologies, and relevant emission performance;
b. A written narrative and schematics detailing various state-of-the-art NOx control technologies for achieving additional NOx emission reductions from existing MWCs, including technologies capable of achieving NOx emission levels comparable to those for a new source in consideration of the overall facility design at Wheelabrator Baltimore Inc.;
c. An analysis of whether each state-of-the-art control technology identified under §E(1)(b) of this regulation could technically be implemented at the Wheelabrator Baltimore Inc. facility;
d. Capital and operating costs, NOx emission benefits, and air quality impacts resulting from installation of each state-of-the-art control technology as identified under §E(1)(b) of this regulation; and
e. An estimated timeline for installation of each state-of-the-art control technology as identified under §E(1)(b) of this regulation which shall include design time, construction, operational testing, and start up.

ii. Upon written request, Wheelabrator Baltimore Inc. shall submit any other information that the Department determines is necessary to evaluate the feasibility analysis.

iii. Not later than January 1, 2020, based upon the results of the feasibility analysis as required under §E(1) of this regulation, the owner or operator of Wheelabrator Baltimore Inc. shall propose and submit a NOx 24-hour block average emission rate, NOx 30-day rolling average emission rate, and NOx mass loading emission limitation for periods of startup, shutdown and malfunction.

F. COMAR 26.11.08.10F, requires that the owner or operator of a Large MWC continuously monitor NOx emissions with a continuous emission monitoring system in accordance with COMAR 26.11.01.11.

G. COMAR 26.11.08.10G, not later than 45 days after the effective date of this regulation, the owner or operator of a Large MWC shall submit a plan to the Department and EPA for approval that demonstrates how the Large MWC will operate installed pollution control technology and combustion controls to meet the requirements of COMAR

26.11.08.10A. The plan shall summarize the data that will be collected to demonstrate compliance with COMAR 26.11.08.10A. The plan shall cover all modes of operation, including but not limited to normal operations, startup, and shutdown.

Note: The Permittee submitted the plan for approval required by Condition G on January 22, 2019.

H. COMAR 26.11.08.10H, beginning July 1, 2019, the owner or operator of a Large MWC shall submit a quarterly report to the Department containing:

i. Data, information, and calculations which demonstrate compliance with the NOx 24-hour block average emission rate as required in §B of this regulation;

ii. Data, information, and calculations, including NOx continuous emission monitoring data and stack flow data, which demonstrate compliance with the startup and shutdown mass NOx emission limits as required in §D of this regulation;

iii. Flagging of periods of startup and shutdown and exceedances of emission rates;

iv. NOx continuous emission monitoring data and total urea flow rate to the boiler averaged over a 1-hour period, in a Microsoft Excel format; and

v. Documented actions taken during periods of startup and shutdown in signed, contemporaneous operating logs.

I. COMAR 26.11.08.10I, beginning July 1, 2020, the quarterly report to be submitted pursuant to COMAR 26.11.08.10H of this regulation shall also include data, information, and calculations which demonstrate compliance with the NOx 30-day rolling average emission rate as required in COMAR 26.11.08.10C of this regulation.

J. COMAR 26.11.08.10J, no less than 2 weeks advance notice and the opportunity to observe activities shall be provided to the Department prior to any optimization procedure, including installation or operation of NO_x emission control technology, for the express purpose of complying with the requirements of COMAR 26.11.08.10E(1).

K. COMAR 26.11.08.10K, which requires compliance with the NO_x emission standards in COMAR 26.11.08.10B, C, and D shall be demonstrated with a continuous emission monitoring system.

L. COMAR 26.11.08.10M, Compliance with the NO_x Mass Loading Emission Limitation for the Wheelabrator Baltimore Inc.

i. Compliance with the NO_x mass loading emission limitation for periods of startup and shutdown in COMAR 26.11.08.10D(2) shall be demonstrated by calculating the 24-hour average of all hourly average NO_x emission concentrations from continuous emission monitoring systems.

ii. The calculations in COMAR 26.11.08.10M(1) shall utilize the applicable Prevention of Significant Deterioration calculation methodology, for all the hours during the 3-hour startup or shutdown period and the remaining 21 hours of the 24-hour period.

WHEELABRATOR BALTIMORE, L.P.
1801 ANNAPOLIS ROAD
BALTIMORE, MD 21230
PART 70 PERMIT NO. 24-510-1886
PERMIT FACT SHEET

BACKGROUND

Wheelabrator Baltimore, L.P. (Wheelabrator or the "Company"), formerly known as Baltimore RESCO Company, L.P., operates a municipal solid waste resource recovery facility (SIC Code 4953). The facility consists of three large mass burn waterwall municipal waste combustors (MWC) each rated at 750 tons per day (TPD) yielding a facility wide capacity of 2,250 TPD. The steam that is generated by the MWCs is either sold to a steam distribution system or used to produce electricity via an on-site steam turbine.

Combustion gases are exhausted through a stack (Emission Point EP1) that contains three flues, one for each of the three MWCs. Each MWC train is equipped with a urea injection selective non-catalytic reduction (SNCR) system to control NOx emissions; a "slaked lime" spray dryer absorber (SDA) system to control acid gas emissions; an activated carbon injection system for enhanced mercury and dioxin/furan control; and a four field electrostatic precipitator (ESP) to control particulate matter and metals from the exhaust stream. Each stack is equipped with a continuous opacity monitoring system (COM) and continuous emission monitoring systems (CEMS) for monitoring the carbon monoxide (CO), sulfur dioxide (SO2), and nitrogen oxides (NOx) emissions, as well as an oxygen (O2) and carbon dioxide (CO2) monitors for monitoring the stack gas dilution. Additionally, SO2 and O2 CEMS are located upstream of control devices for determining percent reduction of SO2.

Three wet scrubbers are used to control particulate matter from the ash handling areas. One wet scrubber controls particulate emissions from the ash handling area vent. The second wet scrubber is used to control particulate matter from the ash load out area vent. A third wet scrubber is used to control particulate emissions from the ash trommel area vent. All three wet scrubbers are operated on an as needed basis to ensure that particulate matter is controlled from ash handling areas.

Other registered equipment at this facility include three (3) lime storage silos equipped with a common bin vent filter, and one (1) activated carbon storage silo equipped with a bin vent bag filter. Both silos dispense their respective materials into a closed system that minimizes the potential for fugitive emissions.

The ash handling areas and the storage silos have a potential to emit for particulate matter of less than 1 ton per year. Consequently, for the purposes of the Company's Part 70 permit, these sources have been listed in the insignificant activities section of the permit.

The following table summarizes the actual emissions from Wheelabrator based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_x (TPY)	SO_x (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2017	1101	308	11.7	74.9	2.70	81.1
2016	1141	259	8.8	73.6	2.70	99.4
2015	1123	254	8.2	69.2	2.45	95.5
2014	1076	311	12.2	66.0	3.30	76.1
2013	1067	321	16.0	74.4	4.10	107.1

The major source threshold for triggering Title V permitting requirements in Baltimore City is 25 tons for VOCs and NOx, 100 tons for the other criteria pollutants, 10 tons for any single hazardous air pollutant (HAP) and 25 tons for the aggregate of all HAP emissions. Since the NOx, SO2 and HAP emissions are greater than the major source threshold, and the fact that the facility is a municipal waste combustor, the company is required to obtain a Title V- Part 70 Operating Permit under COMAR 26.11.03.01.

The Department received the Company's Part 70 renewal permit application for the Annapolis Road facility on September 6, 2018. The application was deemed by the Department to be administratively complete on September 13, 2018.

Amendments to COMAR 26.11.08 – NOx RACT for Large Municipal Waste Combustors

Under Section 182 of the CAA, 42 U.S.C. §7511a, sources in ozone nonattainment areas classified as moderate and above are subject to RACT requirements. Therefore, the CAA requires MDE to review and revise RACT requirements in the Maryland SIP as necessary to achieve compliance with the ozone NAAQS. EPA defines RACT as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. As part of Maryland's RACT review, MDE has determined that existing NOx RACT requirements should be updated for Large MWC's.

In reviewing existing NOx RACT requirements for adequacy, the Department considers technological advances, the stringency of the revised ozone standard and whether new sources subject to RACT requirements are present in the nonattainment area. The Department must examine existing controls on major sources of NOx to determine whether additional controls are economical and technically feasible, and include any such controls in Maryland's RACT SIP, where appropriate.

Large MWCs in Maryland have demonstrated the ability to reduce NOx emissions by analyzing and optimizing their existing controls. In consideration of regional NOx RACT amendments, optimization studies, and upgrades performed by Maryland sources, the Department has concluded that Maryland's Large MWCs are capable of meeting more stringent NOx RACT requirements.

The amended NOx RACT requirements effective December 6, 2018, can be found under the State Only Enforceable Requirements section of this permit. The NOx RACT requirements pertaining to Large MWCs will be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland's SIP.

GREENHOUSE GAS (GHG) EMISSIONS

Wheelabrator reported the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate almost entirely from the combustion of municipal solid waste. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. However, Wheelabrator is a major source for GHGs (threshold: 100,000 TPY CO_2e) and the Permittee is required to quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from Wheelabrator based on its Annual Emission Certification Reports:

Table 2: Greenhouse Gases Emissions Summary

GHG	**Conversion factor**	**2015** tpy CO_2e	**2016** tpy CO_2e	**2017** tpy CO_2e
Carbon dioxide CO_2	1	764,895	756,337	728,867
Methane CH_4	25	4.1	4.1	4.1
Nitrous Oxide N_2O	298	36.3	36.6	36.0
Total GHG CO_{2eq}		**775,815**	**767,257**	**739,698**

EMISSION UNIT IDENTIFICATION

Wheelabrator Baltimore, L.P. has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 3: Emission Unit Identification

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU - 1	510-1886-2-0255	One (1) 750 TPD Wheelabrator-Frye mass burn waterwall municipal waste combustor equipped with SNCR, SDA, ESP and activated carbon injection systems.	May 1985
EU - 2	510-1886-2-0256	One (1) 750 TPD Wheelabrator-Frye mass burn waterwall municipal waste combustor equipped with SNCR, SDA, ESP and activated carbon injection systems.	May 1985
EU - 3	510-1886-2-0257	One (1) 750 TPD Wheelabrator-Frye mass burn waterwall municipal waste combustor equipped with SNCR, SDA, ESP and activated carbon injection systems.	May 1985

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

An initial Prevention of Significant Deterioration (PSD) approved in 1983 and amended in February 1986 was for the construction of an incinerator with a capacity of 740,000 tons of refuse per year.

In December 1995, the annual throughput capacity of the MWCs were revised to reflect the potential throughput based on the individual MWC units operating continuously at maximum capacity for 365 days per year. Thus, the aggregated maximum annual waste throughput was raised from 740,000 tons to 821,250 tons.

The Permittee is subject to the federal Emission Guidelines under 40 CFR part 60 subpart Cb *Emissions and Guidelines and Compliance Times for Large Municipal Waste Combustors that are constructed on or before September 20, 1994*. The EPA promulgated this subpart in accordance with Sections 111(d)/129 of the Clean Air Act Amendments of 1990, which required EPA to develop performance standards for new

municipal waste combustors (MWCs) and emissions guidelines for existing MWCs. The State of Maryland had the responsibility of developing a State plan to implement the emission guidelines. The Maryland Department of the Environment implemented the Subpart Cb emission guidelines in the COMAR 26.11.08.08 regulations. All affected facilities were required to come into compliance with the requirements of the emission guidelines by December 19, 2000. COMAR 26.11.08.08 incorporates by reference certain paragraphs under New Source Performance Standards for large MWC, 40 CFR part 60, subpart Eb, but the facility is not directly subject to this regulation .

On May 10, 2006, the EPA promulgated revisions to Subparts Eb and Cb. The revisions to Subpart Cb include somewhat more stringent standards for five regulated pollutants: particulate matter (PM), cadmium (Cd), mercury (Hg), lead (Pb) and dioxin/furan. Additionally, minimum CEMs availability requirements were made more stringent. The amendment to Maryland Regulation COMAR 26.11.08.08 to incorporate the May 10, 2006 changes to Subpart Cb was adopted October 2007. The revised standards became effective on April 28, 2009.

On February 4, 2011, the Department issued a letter to Wheelabrator regarding a methodology for demonstrating compliance with certain PSD emission limits for nitrogen oxides (NOx), sulfur dioxide (SO_2) and carbon monoxide (CO). This letter was issued in response to an EPA Order which partially granted and partially denied a citizen petition for EPA to object to the issuance of the Title V operating permit for the Wheelabrator Baltimore, L.P. facility. The Department subsequently revised the averaging time for PSD limits for the emissions of NOx, SO2 and CO so that they would be equivalent to the basis for averaging times established in the original PSD permit issued in 1982. Specifically, the PSD permit states that compliance with the emissions limits will be determined based on the results of the average of three (3) to nine (9) stack test runs. The previously issued Part 70 permit set a 24-hour averaging time for NOx and CO and a 3-hour averaging time for SO2 when compliance is demonstrated with the use of data collected by continuous emissions monitoring systems (COMS). The revised averaging time is set at 8 hours for all three pollutants.

In addition, the Department revised the permit by adding language to explain the methodology that Wheelabrator will use to convert concentration measurements in units of parts per million (ppm) into mass emissions rate of pounds per hour. Continuous emissions monitoring systems measure concentrations of air pollutants in a gas stream, while PSD emissions limits are expressed in pounds per hour. The revised permit provides the formula that will be used for the conversion when CEM data is used to demonstrate compliance with the PSD limits.

Emissions Unit Number(s): EU-1 thru EU-3, Municipal Waste Combustors

Three (3) identical Wheelabrator-Frye 750 TPD mass burn waterwall municipal waste combustors, each rated at 750 tons per day. Each unit is equipped with the following air pollution control devices: a Selective Non-Catalytic Reduction (SNCR) system for NOx removal; a "slaked lime" spray dryer absorber (SDA) system for acid gas removal; an activated carbon injection system for the removal of mercury and dioxins/furans; and a four field electrostatic precipitator for control of particulate matter and metals in the flue gas. (MDE Registration No. 510-1886-2-0255, 2-0256, and 2-0257)

A. Emission Standards and General Requirements

1. The Permittee shall comply with the existing Large MWC emissions limits and operational standards found in Table 4 below. **[Reference: COMAR 26.11.08.08A(1)]**

2. The standards in COMAR 26.11.08.08A(2) apply at all times except during periods of startup, shutdown, or malfunction as provided in 40 CFR §60.58b(a). **[Reference: COMAR 26.11.08.08A(3)]**

    a. Duration of start-up, shutdown, or malfunction period are limited to 3 hours per occurrence, except for carbon monoxide, where the malfunction period may be extended to 15 hours when loss of boiler water level control (e.g., tube failure) or combustion air control (e.g. loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction; **[Reference: COMAR 26.11.08.08A(3), 40 CFR §60.58b(a)(1)(i) and (1)(iii)]**

    b. The start-up period commences when the facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the facility is combusting a fossil fuel or any other auxiliary fuel, and no municipal waste is being combusted; **[Reference: COMAR 26.11.08.08A(3) and 40 CFR §60.58b(a)(1)(i)]**

    c. To allow for waste to be emptied from the throat of the feeding chute, the shutdown period shall begin 30 minutes after the chute to the loading hopper of the combustion train is closed. **[Reference: COMAR 26.11.02.02H]**

Table 4
Emission Standards, General Requirements, and Stack Test Results

Pollutant/ Parameter	***Emissions Standard for a Large MWC*** * Adjusted to 7 percent oxygen on dry basis.	***Performance and Compliance Test Requirements***	***Results of stack tests or compliance demonstrations***
Opacity	10 percent opacity with Continuous Opacity Monitoring System (COMS) based on six minute block averages.	EPA Reference Method 9 and COMS. Applicable test procedures and methods as specified in 40 CFR §60.58b(c); and quality assurance as specified in COMAR 26.11.31.	EPA Reference Method 9 and COMS. The COMS quarterly reports for the past five years showed continuous compliance except for two occasions when the facility had a power failure and one time when there was an electrical short caused by a bird landing on a rectifier and tripped the ESP.
Particulate Matter	25 mg/dscm* (0.01093 gr/dscf)*	EPA Reference Method 5. Annual test, methods and procedures as specified in 40 CFR §60.58b(c).	Stack Test May 2018 Unit 1 – 0.0006 gr/dscf Unit 2 – 0.0016 gr/dscf Unit 3 – 0.0013 gr/dscf
SO_2 (Sulfur Dioxide)	29 ppmv - 24 hr. geometric mean or 75 percent reduction, whichever is less restrictive*	CEMS. Applicable test procedures and methods as specified in 40 CFR §60.58b(e).	CEMS. Based on the certified quarterly CEM reports, there have been no reported violations over the past 5 years.
NOx (Oxides of Nitrogen)	205 ppmv - 24 hr. arithmetic average.	CEMS. Applicable test procedures and methods as provided in 40 CFR §60.58b(h).	CEMS. Based on the certified quarterly CEM reports, there have been no reported violations over the past 5 years.

Table 4
Emission Standards, General Requirements, and Stack Test Results

Pollutant/ Parameter	***Emissions Standard for a Large MWC*** * Adjusted to 7 percent oxygen on dry basis.	***Performance and Compliance Test Requirements***	***Results of stack tests or compliance demonstrations***
CO (Carbon Monoxide)	100 ppmv - 4 hr. block avg.*	CEMS. Methods and procedures as specified in 40 CFR §60.58b(b) and 40 CFR §60.58b(i).	CEMS. Based on the certified quarterly CEM reports, there have been no reported violations over the past 5 years.
HCl (Hydrogen Chloride)	29 ppmv* or at least 95 percent reduction whichever is less restrictive.	EPA Reference Method 26 or 26A. Annual test except as provided in 40 CFR §60.58b(f). Applicable test procedures and methods as provided in 40 CFR §60.58b(f).	Stack test May 2018 Unit 1 – 13.5 ppm Unit 2 – 16.8 ppm Unit 3 – 18.7 ppm
Dioxins /Furans	35 ng/dscm* (total mass) for ESP based control device	EPA Reference Method 23. Annual test except as provided in 40 CFR §60.58b(g) (5) (iii) and 40 CFR §60.38b (b). Applicable test procedures and methods as specified in 40 CFR §60.58b(g).	Stack test May 2017 Unit 1 – 1.0 ng/dscm: Stack test May 2018 Unit 2 – 2.2 ng/dscm; Stack test May 2016 Unit 3 – 3.8 ng/dscm.
Cd (Cadmium)	35 µg/dscm*	EPA Reference Method 29. Annual test except as provided in 40 CFR §60.58b(d). Applicable test procedures and methods as specified in 40 CFR §60.58b(d).	Stack test May 2018 Unit 1 – 1.1 µg/dscm Unit 2 – 3.7 µg/dscm Unit 3 – 4.2 µg/dscm

Table 4
Emission Standards, General Requirements, and Stack Test Results

Pollutant/ Parameter	***Emissions Standard for a Large MWC*** * Adjusted to 7 percent oxygen on dry basis.	***Performance and Compliance Test Requirements***	***Results of stack tests or compliance demonstrations***
Pb (Lead)	400 µg/dscm*	EPA Reference Method 29. Annual test except as provided in 40 CFR§ 60.58b(d). Applicable test procedures and methods as specified in 40 CFR §60.58b(d).	Stack test May 2018 Unit 1 – 10.7 µg/dscm Unit 2 – 31.4 µg/dscm Unit 3 – 35.9 µg/dscm
Hg (Mercury)	50 µg/dscm* Or 85% reduction by weight applies if less restrictive than the above.	EPA Reference Method 29. Annual test except as provided in 40 CFR §60.58b(d) and (m). Applicable test procedures and methods as specified in 40 CFR §60.58b(d).	Stack test May 2018 Unit 1 – 5.6 µg/dscm Unit 2 – 8.2 µg/dscm Unit 3 – 7.9 µg/dscm
Load	Not to exceed 110 percent of maximum load during most recent dioxin/furan performance test during which compliance with the dioxin/furan emission limit is achieved.	Continuous monitoring – 4 hr. block arithmetic average steam load. Applicable test procedures and methods as provided in 40 CFR §60.58b(i).	Stack test May 2017 Test load on Unit 1-192 klb/hr New Load Limit 211.2 klb/hr per unit Stack test May 2018 Test load on Unit 2-192 klb/hr New Load Limit 211.2 klb/hr per unit Stack test May 2016 Test load on Unit 3-192 klb/hr New Load Limit 211.2 klb/hr per unit

Table 4
Emission Standards, General Requirements, and Stack Test Results

Pollutant/ Parameter	***Emissions Standard for a Large MWC*** * Adjusted to 7 percent oxygen on dry basis.	***Performance and Compliance Test Requirements***	***Results of stack tests or compliance demonstrations***
Temperature	The maximum particulate matter control device inlet temperature must not exceed by more than 17 degrees Celsius the temperature during the most recent dioxin/furan test demonstrating compliance.	Continuous monitoring. The temperature shall be calculated in 4-hr. block arithmetic averages. Applicable test procedures and methods satisfying the requirements of 40 CFR §60.58b(i) and exemptions in 40 CFR 60.53b(c).	Stack test May 2017 Unit 1 ESP inlet- 315 ºF (157.2 ºC) New Temp limit -335.7 ºF (168.7 ºC) Stack test May 2018 Unit 2 ESP inlet- 315 ºF (157.2 ºC) New Temp limit -335.7 ºF (168.7 ºC) Stack test May 2016 Unit 3 ESP inlet- 314 ºF (156.7 ºC) New Temp limit -343.6 ºF (173.1 ºC)
Fugitive Ash Emissions	Visible emissions less than 5 percent of the observation period during ash transfer.	EPA Reference Method 22 observations as specified in 40 CFR §60.58b(k). Annual test. The emission limit excludes visible emissions discharged inside buildings or enclosures of ash conveying systems or during maintenance and repair of ash conveying systems as specified in 40 CFR §60.55b.	EPA Reference Method 9 observations as specified in 40 CFR 60.58b(k). Annual test. The emission limit excludes visible emissions discharged inside buildings or enclosures of ash conveying systems or during maintenance and repair of ash conveying systems as specified in 40 CFR 60.55b.

Compliance Demonstration

Testing Requirements:
The Permittee shall perform testing requirements for the emissions and operational parameters in accordance with the test methods and specified frequencies as referenced in Table 3 for the three large MWCs no less than 9 months and no more than 15 months following the previous test. **[Reference: COMAR 26.11.08.08A(2), which references 40 CFR §60.58b]**

Monitoring Requirements:
1. The Permittee shall:

    a. Install, calibrate, operate and maintain continuous emission monitors for carbon monoxide, oxygen, opacity, oxides of nitrogen, and sulfur dioxide;

    b. Locate monitors downstream of the final air pollution control device to measure concentrations of oxygen, oxides of nitrogen, sulfur dioxide, and opacity of the exhaust gases; and

    c. Install, operate, and maintain at a minimum, one temperature monitor to measure the temperature of the flue gas as it enters the particulate matter control device. **[Reference: COMAR 26.11.01.11B(3) and COMAR 26.11.08.08B(1)]**

2. If the percent removal option is to be used to show compliance with regulation COMAR 26.11.08.08B (1)(b), sulfur dioxide and oxygen monitors shall also be located upstream of the pollution control device. Monitors shall be located at the combustor outlet exit to measure concentrations of carbon monoxide. **[Reference: COMAR 26.11.08.08B(2)]**

    Note: SO_2 and O_2 are measured upstream of the air pollution control device to calculate % removal and CO is measured downstream of air pollution control devices as approved per COMAR 26.11.08.08(B)(4)

3. The monitors required by COMAR 26.11.08.08B(1)(a) and (b) of this regulation shall meet the installation, certification, reporting, record-keeping, and other requirements of COMAR 26.11.01.10, performance specifications in 40 CFR Part 60, Appendix B, the quality assurance procedures in 40 CFR Part 60, Appendix F, specifications in 40 CFR Sec. 60.58b, and COMAR 26.11.31.. **[Reference: COMAR 26.11.08.08B(3)]**

4. A person shall apply for and receive written approval from the Department before installing any of the monitors required in this chapter. **[Reference: COMAR 26.11.08.08(B)(4)]**

5. During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed. **[Reference: 40 CFR § 60.58b(m)(1)]**

6. An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance tests for mercury emissions and each subsequent performance test for mercury emissions. **[Reference: 40 CFR §60.58b(m)(1)(i)]**

7. An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance tests for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, the owner or operator may elect to apply the same estimated average carbon feed rate from the tested facility for all the similarly designed and operated facilities at the MWC plant. **[Reference: 40 CFR § 60.58b(m)(1)(ii)]**

8. During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate shall be averaged over a block 8-hour period and the 8-hour block average must exceed or equal the level(s) documented during the performance tests specified under 40 CFR 60.58b(m)(1)(i)&(ii) except as specified in §§(m)(2)(i) and §§(m)(2)(ii). **[Reference: 40 CFR §60.58b(m)(2)]**

9. During the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual performance test, no limit is applicable for the average mass carbon feed rate if the provisions of §§(m)(2)(ii) are met. **[Reference: 40 CFR 60.58b(m)(2)(i)]**

10. The limit for average mass carbon feed rate may be waived in accordance with permission granted by the Administer for the purpose of evaluating system performance, testing new technology or control technology, diagnostic testing or related activities. **[Reference: 40 CFR § 60.58b(m)(2)(ii)]**

Record Keeping Requirements:

1. The Permittee shall maintain records in accordance with 40 CFR § 60.59(b) of Subpart Eb, as applicable, except for the siting requirements under §§

60.59b(a), (b)(5), and (d)(11) of 40 CFR 60 Subpart Eb. **[Reference: COMAR 26.11.08.08C(1)]**

2. Continuous emissions monitoring data reduction and data availability shall be in accordance with COMAR 26.11.01.10. If there is any inconsistency between COMAR 26.11.01.10 and 40 CFR Part 60, the requirements of 40 CFR Part 60 govern. **[Reference: COMAR 26.11.08.08C(2)]**

3. The Permittee shall estimate the total carbon usage of the plant for each calendar quarter by two independent methods as stated in conditions 4 and 5 below. **[Reference: 40 CFR §60.58b(m)(3)]**

4. The Permittee shall estimate total carbon usage at the plant by maintaining records for of the weight of carbon delivered to the plant on a quarterly basis. **[Reference: 40 CFR §60.58b(m)(3)(i)]**

5. The Permittee shall estimate the average carbon mass feed rate for each hour of operation for each affected facility based on the carbon feed system parameters specified during performance testing. The Permittee shall sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter. **[Reference: 40 CFR §60.58b(m)(3)(ii)]**

6. The Permittee shall retain records of quarterly carbon usage using the methods described above for a period of 5 years and make that data available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

Reporting Requirements:

1. The Permittee shall submit a quarterly CEM/COM and parameter monitoring data excess emission report to the Department not later than 30-days following each calendar quarter. At a minimum, the report shall include: **[Reference: COMAR 26.11.01.10D(2)(c) and COMAR 26.11.01.11E(2)(c)]**

   a. A listing of the time period, magnitude, and cause of all emissions that exceeded the applicable emission or parameter monitoring standard for the respective emission/parameter averaging time,

   b. A listing of all excluded data and the reason for excluding the data,

   c. A listing of all the 1-hour average emission concentrations, 1-hour percent reduction data, as applicable, and 1-hour parameter monitoring data for any day that there was either an exceedance of an emission or parameter standard or for any day that the Permittee excluded data. The listing is only

required for the respective pollutant or parameter that there was an exceedance for or Permittee excluded data,

d. A listing of time periods (including invalid hourly averages and invalid 6 minute averages for COMS) and cause of all CEM/COM and parameter monitor downtimes,

e. A listing of installation (MWC units) downtime,

f. Daily calibration activities when results exceeded the daily calibration drift and the results of all audits performed during the quarter, and

g. A summary of the quarterly totals of excess emissions, installation downtimes, and monitor downtimes.

2. A person who owns an existing MWC subject to this regulation shall submit to the Department semi-annual reports that includes the information specified in §§(g)(1) through §§(g)(5)**,** as applicable, by August 1st and February 1st for the respective reporting periods: **[Reference 40 CFR §60.59b(g)]**

3. A person who owns an existing MWC subject to this regulation shall submit to the Department semi-annual reports that includes the information specified in §§(h)(1) through §§(h)(5), as applicable, for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified under this subpart by August 1st and February 1st for the respective reporting periods. **[Reference: 40 CFR §60.59b(h)]**

Compliance Status

The Permittee performed stack tests of all applicable parameters annually and has demonstrated compliance with the emission limits established in COMAR 26.11.08.08A(2). The most recent stack test occurred in May 2018. The results are shown in Table 4.

Rationale for Periodic Monitoring

The permit requires continuous monitoring of specific operating parameters such as activated carbon mass feed rate, municipal waste combustor unit load, and maximum inlet temperature to the particulate matter control device. Monitoring of these parameters provides assurance that the incinerators continue to operate at the levels established during compliance stack tests. Stack tests provide a snapshot of a facility's emissions at the time testing is performed. In conjunction with the testing and sampling of emissions recording devices are used to simultaneously measure a range of pollutants and operating conditions in several "runs" over the course of a

testing day. By this means, operating conditions are correlated with compliance with the emissions limits.

It is also well established that good combustion practice is the most effective strategy in reducing PM emissions (which includes mercury, cadmium, and lead), dioxins/furans, other organic pollutants as well as carbon monoxide (CO) from municipal waste combustors. Good combustion control practices include proper design, construction, operation and maintenance practices for combustion grates, boilers, and air pollution controls. Low CO levels are an indicator of complete combustion and that the unit is being operated in a manner that minimizes not only CO emissions but also emissions of other pollutants. Maintaining low CO emissions ensures complete combustion of all combustible waste and destruction of organic compounds. Good combustion practices also includes maintaining unit load or steam flow near levels established during stack testing to minimize carryover of fly ash from the furnace to boiler sections and thereby reduce PM and associated emissions loading to air pollution controls.

Wheelabrator is subject to the emission guidelines for existing large municipal waste combustors (MWCs), which impose limits for PM, mercury, cadmium, lead, hydrogen chloride, and dioxins/furans. MDE has evaluated whether the monitoring requirements in the existing federal rules are sufficient for assuring compliance with these limits. As part of this analysis, MDE has reviewed the underlying basis of the MWC rule and determined that there is nothing unique to the Wheelabrator facility that would indicate that it is not representative of existing municipal waste combustors in general with respect to construction design, air pollution control equipment, continuous monitoring systems, emissions variability, types of wastes combusted, etc. Furthermore, the use of parametric and surrogate monitoring has been reaffirmed in rules promulgated by EPA, including the Portland Cement MACT and the Boiler MACT. EPA, in the September 9, 2010 Final Rule promulgating National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants reaffirmed EPA's position on using surrogate monitoring. In particular, EPA notes that the Courts have also upheld EPA's position- "Particulate matter serves as a surrogate for non-volatile metal HAP (a determination upheld for this source category in National Lime Association, 233 F.3d at 637–39)." EPA's Boiler MACT (40 CFR part 63, subpart DDDDD, Mar 21, 2011 final, amended Jan 31, 2013) also references both parametric monitoring and the use of surrogates as acceptable methods for demonstrating continuous compliance with Clean Air Act emission standards.

The following table summarizes the monitoring strategy for each pollutant, background information and permit conditions that assure compliance with the emission limitations for PM, Pb, Cd, Hg, dioxin/furans, and HCl.

Table 5 – Monitoring Strategies		
Pollutant(s)	Surrogate pollutant / Operating Parameter	Permit Condition
PM, Pb and Cd	Opacity (COMs)	The opacity limit in the Title V permit is 10 percent, averaged over a 6 minute block period. The facility must operate and maintain a continuous opacity monitoring system. Wheelabrator operates electrostatic precipitators (ESP) for control of particulate matter (PM) and MWC metals and to capture carryover carbon and lime from the ACI and SDA control systems. Relative changes in opacity levels are used by operators to make adjustments and ensure ESPs are operating at high efficiency levels. During the stack test opacity is measured and the results are evaluated in order to determine whether compliance with the opacity limit will also assure compliance with the PM emissions limit. The stack test results over the past years have shown that emissions of PM, Pb, and Cd are an order of magnitude below the emissions standards. The PM standard is 25 mg/dscm (0.01093 gr/dscf) and the results ranged from 0.00045 to 0.0079gr/dscf. For lead the standard is 400 µg/dscm and the results ranged from 14.2 to 103 µg/dscm. For Cd the standard is 35 µg/dscm and the results were 0.3 to 7.3 µg/dscm.
Hg, Dioxin/ Furans	Carbon mass feed rate	*An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions.* During operation of the affected facility, the carbon injection system operating parameter(s)

		that are the primary indicator(s) of the carbon mass feed rate shall be averaged over a block 8-hour period and the 8-hour block average must exceed or equal the level(s) documented during the performance tests specified under 40 CFR 60.58b(m)(1)(i)&(ii) except as specified in §§(m)(2)(i) and §§(m)(2)(ii). The Permittee shall maintain records in accordance with 40 CFR Sec. 60.59(b) of Subpart Eb, as applicable, except for the siting requirements under Sec. 60.59b(a), (b)(5), and (d)(11) of 40 CFR 60 Subpart Eb. [Reference: COMAR 26.11.08.08C(1)] Incorporated by reference is 40 CFR Sec. 60.59(b) of Subpart Eb which states: "(d)(4) For affected facilities that apply activated carbon for mercury or dioxin/furan control, the records specified in paragraphs (d)(4)(i) through (d)(4)(v) of this section. (i) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under §60.58b(m)(1)(i) of this section during the initial mercury performance test and all subsequent annual performance tests, with supporting calculations. (ii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under §60.58b(m)(1)(ii) of this section during the initial dioxin/furan performance test and all subsequent annual performance tests, with supporting calculations. (iii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated for each hour of operation as required under §60.58b(m)(3)(ii) of this section, with supporting calculations. (iv) The total carbon usage for each calendar

		quarter estimated as specified by paragraph 60.58b(m)(3) of this section, with supporting calculations. (v) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed)." Note: The facility continuously monitors the screw feed rate and once every 8 hours collects a sample in a bucket to verify the pounds/hour carbon feed rate.
PM, Cd, Pb, Dioxins/ Furans	Unit Load	*The maximum demonstrated municipal waste combustor unit load shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/ furan emission limit specified in § 60.52b(c) is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.* The facility is required to continuously monitor 4 hr. block arithmetic average steam load. The applicable test procedures and methods are as provided in 40 CFR 60.58b(i)(6) and (8). The load is limited not to exceed 110 percent of maximum load during most recent dioxin/furan performance test during which compliance with the dioxin/furan emission limit is achieved.
HCl, Hg, Dioxin/ Furans	Maximum Inlet Temperature	*To determine compliance with the maximum inlet temperature to the particulate matter control device requirements under §60.53b(c), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature*

		of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages. Research on the performance of MWC's has shown that maintaining low flue gas temperature has the dual effect of improving reagent (lime) utilization and increases removal of volatile trace elements, such as mercury and dioxin/furans, as well as acid gas emissions (HCl and SO_2). Maintaining particulate matter control device inlet temperature near the level established during annual dioxin testing ensure temperatures are maintained well below the temperature where post furnace formation of dioxins/furans on fly ash collected in the particulate matter control device could occur.
PM, Pb, Cd, Hg, HCl, and Dioxins /Furans	CO CEMS	The facility must meet an Emissions Guidelines CO limit of 100 ppv on a 4 hour block average, excluding startup, shutdown, and malfunctions and a PSD limit of 121 pounds/hour based on an 8 hour block average with no exclusion of SSM . A continuous emissions monitoring system for CO is required to be operated and maintained. Combustion control is most effective in reducing dioxin, furans, other organic pollutants, PM, NOx and CO emissions (75 FR 31942, June 4, 2010 – Proposed rule for Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units.) Low CO levels are an indicator of complete combustion and that the unit is being operated in a manner that minimizes not only CO emissions, but also emissions of other pollutants. (75 FR 31967).

HCl	SO_2 CEMS	Wheelabrator utilizes an acid gas scrubber to reduce SO_2 emissions and uses a CEMs to measure SO_2 emissions and performance of the scrubber. HCl is more reactive than SO_2. The HCl reaction with the caustic in the scrubber will complete before the SO_2 reaction so the HCl emissions are related to SO_2 emissions. When compliance with the SO_2 limit is achieved, there is a reasonable level of assurance that continuous compliance with the HCl will also be achieved. EPA has noted the relationship between controls for HCl and controls for SO_2. The September 9, 2010 final Portland Cement MACT states- "Setting technology-based MACT standards for HCl will result in significant reductions in emissions of other pollutants, most notably SO_2…" EPA also noted the co-benefits of reducing SO_2 through an HCl limit in the recently finalized Boiler MACT as an explanation for not establishing a risk based exemption for HCl.
All pollutants	Trained and Certified Incinerator Operators	The permit requires Wheelabrator to have properly trained and certified incinerator operators. As part of the certification process, the operators receive training on combustion controls, including proper design, construction, operation and maintenance of the incinerator to destroy or prevent the formation of air pollutants prior to their release to the atmosphere. Combustion control is most effective in reducing PM, and CO emissions as well as dioxins/furans.

B. Incinerator Operator Training

1. Certification Requirement—A person may not operate or allow an incinerator to be operated unless the owner certifies to the Department on a form approved by the Department that the incinerator operator:

   a. Has completed an initial training course approved by the Department which meets the requirements of COMAR 26.11.08.09D; and

   b. Annually, after initial certification, completes a review course approved by the Department.

2. For any incinerator operator who operates a municipal waste combustor (MWC), the training course shall address the following subjects in detail:

   a. Overall operation, maintenance, and performance of the facility;

   b. Start-up and shut-down of the facility;

   c. Applicable federal, State, and local environmental regulations, and sanctions for violations;

   d. Policies and procedures for proper and safe plant operation;

   e. Maintaining records of facility operations;

   f. Actions to correct upsets or emergencies;

   g. Control room operations;

   h. Ash handling and disposal;

   i. Combustion theory;

   j. Air pollution control technology; and

   k. Continuous emission monitors and their calibration, and quality assurance requirements.

3. For the operator of any municipal waste combustor (MWC), completing a training course means:

a. Completing an initial training course approved by the Department of at least 5 days (40 hours) duration; and

b. Passing a written test approved by the Department.

4. The certified operator shall, after initial training, complete and pass an annual review course approved by the Department of at least 1-day (8 hours) duration.

5. Operation and Maintenance Manual.

   a. The owner or operator of a large MWC, shall develop and maintain on-site, an operations and maintenance manual that contains, at a minimum, all of the course content requirements in COMAR 26.11.08.09D(1) and in 40 CFR §60.54b(e); and

   b. The operations and maintenance manual shall be updated annually.

Compliance Demonstration

1. The Permittee shall maintain a copy of a certificate issued by the Department to each incinerator operator who has satisfactorily completed an approved incinerator training course and has passed the exit examination. **[Reference: COMAR 26.11.08.09 and COMAR 26.11.03.06C(3)]**

2. Records and Notification. Within 10 days after training is complete, the person who conducts an approved incinerator operator training course shall:

   a. Notify the Department in writing, of the names, employee identification numbers, and employer of those incinerator operators who have successfully complete the training course; and

   b. Provide a certificate to each incinerator operator who has satisfactorily completed the training course and has passed the required examination. **[Reference: COMAR 26.11.08.09G(1) & (2)]**

Compliance Status

The Company has an approved MWC operator-training course and Operations and Maintenance Manual. All operators are current on their Operator Training Certification. The Incinerator Operator Training program based on the requirements found in COMAR 26.11.08.09 for MWCs and their operators have been approved as part of Maryland's 111(d) Plan for MWCs and meets the incinerator operator training requirements in Subpart Eb. [40 CFR §60.54b(e)]

C. PSD Approval 83-01 (Feb. 21, 1986)

1. The Permittee shall not exceed the facility-wide **(MWC Units #1, 2 & 3)** emissions limitations specified below **[Reference PSD Approval 83-01, Part I-Condition (1)]**:

   SO_2: 375 lbs./hr. and 1,478 tons/year
   CO: 121 lbs./hr. and 477 tons/year
   NOx: 298 lbs./hr. and 1,176 tons/year
   Fluorides: 12 lbs./hr. and 47 tons/year

2. Compliance with the facility wide lb/hr PSD emission limit shall be determined as follows:

   a. SO_2, CO and NOx: 8 hour block average. A valid facility eight hour block average is based on a minimum of 6 hours of total facility hourly data.

   b. Fluorides: the average of three test runs using EPA Reference Method 13B, 26A, or equivalent

   c. All emissions associated with startup, shutdown, and malfunction episodes are included in the pounds per hour standard. **[Reference: COMAR 26.11.02.02H]**

3. The tons per year PSD emission limits are a 12-month composite (rolling monthly) and includes all emissions associated with startup, shutdown, and malfunction episodes. **[Reference: COMAR 26.11.02.02H]**

4. The Permittee shall develop and submit to the Department for approval, procedures to ensure that only acceptable wastes as defined in Appendix A of the PSD application are incinerated. **[Reference: PSD Approval 83-01 Part I, Condition (4)]**

5. The start-up fuel for the incinerator shall be natural gas. The incinerator shall not exceed a fuel consumption rate of 2.7×10^7 ft.^{3} of natural gas in any one-year period. **[Reference: PSD Approval 83-01 Part I, Condition (5)]**

Compliance Demonstration

Testing Requirements:

The Permittee shall perform annual testing for fluorides no less than 9 months and no more than 15 months following the previous test using EPA Reference Method 13B or 26A or equivalent. Testing may be combined with the existing large MWC annual HCl testing. [**Reference COMAR 26.11.03.06C(3)]**

Monitoring Requirements:

1. The Permittee shall monitor natural gas fuel usage to ensure compliance with the PSD limitation. Total facility fuel usage shall be calculated on a 12 month rolling average basis. [**Reference:** COMAR 26.11.03.06C(3)].

2. The Permittee shall continuously monitor pollutants and other parameters necessary to calculate the pounds per hour PSD limits. The methodology for calculating the lbs/hr emissions shall be as follows:

   Average lbs/hour = (ppm)*(AFSF factor (DSCFH/Klbs))*(actual steam flow (Klbs/hr))*(Conversion Factor), where:

   - ppm = CEM hourly average ppmdv for CO, NOx, and SO_2
   - Stack test air flow to steam flow factor (AFSF) = Dry standard cubic foot per hour air flow per thousand lbs steam (DSCFH/Klb)
   - Actual steam flow (Klbs/hour) = steam flow in thousand pounds per hour
   - Conversion Factor = 1.66E-07 for SO2, 1.194E-07 for NOx, and 7.27E-08 for CO from 40 CFR Part 60 Appendix B Method 19 procedures for converting ppm to lbs/dscf. **[Authority: COMAR 26.11.03.06C(3)]**

     Note: *The AFSF factors are to be updated during annual stack testing or an alternative methodology approved by the Department.*

Record Keeping Requirements:

1. The Permittee shall retain records of all emissions data and operating parameters and fuel use, as required by the terms of PSD Approval 83-01 for a period of five (5) years. **[Reference: PSD Approval 83-01 Part II Condition (5) and COMAR 26.11.03.06C**]

2. The Permittee shall maintain records of the calculated pounds per hour and the tons per year for a period of 5 years. **[Reference: COMAR 26.11.03.06C]**

3. The Permittee shall maintain a record of the results of the annual stack test for fluorides for a period of 5 years. **[Reference: COMAR 26.11.03.06C]**

Reporting Requirements:

1. The Permittee shall submit the results of annual fluoride tests along with the other annual emission test results that satisfy COMAR 26.11.08.08C(1). **[Reference: COMAR 26.11.03.06C]**

2. The Permittee shall submit a quarterly excess emission report to the Department not later than 30-days following each calendar quarter. At a minimum, the report shall include:

   a. A listing of the time period, magnitude, and cause of all emissions that exceeded the applicable emission standard for the respective emission averaging time and An explanation of the cause for the exceedance and actions taken to return to compliance, and

   b. A listing of all of the 12-month rolling emissions for SO_2, CO, NOx for the quarter. **[Reference COMAR 26.11.03.06C]**

3. If, for any reason, the Permittee does not comply or will not be able to comply with the emission limitations or other conditions specified in this Approval, the Permittee 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 non-compliance; and

   e. Steps taken to prevent recurrence of the non-compliance.

4. Submittal of this report does not constitute a waiver of the emission limitations or other conditions of this Approval nor does it in anyway restrict the Department's Reference to enforce the conditions. **[Reference: PSD Approval 83-01 Part II-Condition (6)]**

   Note: This report applies to noncompliance with PSD Approval 83-01 emission limits and other PSD conditions only.

Rationale for Periodic Monitoring

The revised monitoring and calculation methodology is as follows: NOx, SO_2 and CO CEM data from each unit is converted to hourly average lbs/hr emission rates using unit specific stack test air flow to steam flow (AFSF) factors in units of dry standard cubic feet per hour per thousand pounds of steam. The AFSF factors are derived from the stack test air flow and boiler steam flow averages for each unit from annual stack testing. The AFSF factors are updated during annual stack testing or an alternative methodology approved by the Department. Actual hourly boiler steam flow averages will be used in conjunction with the AFSF factors to calculate hourly stack air flows based on boiler operating levels. If steam load increases, then the calculated hourly stack air flow and emissions rate increase proportionately.

The hourly emissions rate calculations are programmed into the CEM data loggers located in the CEM shelter and transmitted to the CEM data acquisition system (DAS) computer. The DAS computer calculates hourly total facility emissions for SO_2, NOx, and CO and then calculates the SO_2, NOx, and CO 8 hour block total facility averages from the hourly facility emissions totals. A valid facility eight hour block average is based on a minimum of 6 hours of total facility hourly data. A summary of the daily 8 hour block average facility emissions rate for each unit and total facility emission averages are printed daily and reviewed by operating personnel. The annual 12 month rolling SO_2, NOx, and CO total emissions will be calculated in CEM DAS computer. Daily total facility emissions will be used to generate monthly facility emissions totals in tons. The 12 month rolling average of total facility emissions will be calculated at the end of each calendar month. The 12 month rolling average of total facility emissions will be used in the annual emission inventory report. The hourly CEM data, hourly unit, and total facility emissions averages and monthly facility emission totals will be archived in the CEM DAS computer hard drive.

The proposed monitoring methodology provides an accurate determination of facility emissions and compliance with PSD emissions limits for the following reasons: 1) Stack test air flow to steam flow factors are derived from actual stack testing conditions at representative operations and will be revised annually based on boiler operating conditions, 2) Real time boiler hourly steam flow averages will be used to calculate stack test air flows proportionately to boiler load making sure emissions accurately reflect boiler operating loads, 3) Stack test air flows are obtained directly from EPA Reference Method 1-4, 4) The CEMs are subject to the Department and EPA CEM QA/QC requirements that ensure accuracy, 5) Steam flow accuracy is verified by annual calibration of steam flow meters in accordance with the 40 CFR 60 Subpart Cb requirements, and 6) Stack test air flow to steam flow factors for each unit will be provided in the annual stack test report for the Department's review and approval. The approved stack test flow to steam flow factors will be included with the minimum carbon feed rates, maximum boiler steam flows and maximum ESP

inlet temperature limits provided in the Department's stack test report acceptance letter.

D. NSINA Approval No. 83-01 (Feb. 21, 1986)

Each furnace shall be equipped with an ESP) that shall be operated in a manner such that particulate matter at the ESP outlet does not exceed 0.017 gr/dscf. **[Reference: NSINA Approval 83-01 Condition (3)]**

Note: compliance with the Large MWC particulate emissions of 25 mg/dscm (0.01093 gr/dscf) under COMAR 26.11.08.08A(2) assures compliance with the NSINA limit.

Compliance Demonstration
The Permittee shall perform annual testing for particulate emissions in accordance with the standards for existing large MWCs as provided in COMAR 26.11.08.08A(2). **[Reference: COMAR 26.11.03.06C(3)]**

Note: The NSINA particulate emissions standard is subsumed by the particulate emissions standard of COMAR 26.11.08.08A(2).

Compliance Status
Each furnace is equipped with electrostatic precipitators and the particulate grain loading at the outlet ends of the ESP complies with the particulate matter emission standard for large MWCs found at COMAR 26.11.08.08A(2). Stack testing is performed on an annual basis to demonstrate compliance and the facility has always demonstrated compliance. Results of the most recent stack test are shown in Table 4.

E. Visible Emissions

No emissions, other than water in an uncombined form, visible to human observers. The no visible emission requirement does not apply to emissions during start-up, or adjustments, or occasional cleaning of control equipment, if: (1) the visible emissions are not greater than 40 percent opacity; and (2) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. **[Reference: COMAR 26.11.08.04B&C]**

Compliance Demonstration
The Permittee must conduct periodic opacity or fugitive emission test using EPA Reference Method 9 observations for a 15 minute period at least once per month while the units are in operation. Records of these observations must be kept on-site for five (5) years and made available to the Department on request.

COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected. In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance with the emissions limitation or standard; have pre-control emissions of at least 100% of the major source amount; and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emissions unit.

CAM Plan Applicability Determination

Wheelabrator Baltimore, L.P. consists of three municipal waste combustors (MWCs) that generate steam, a portion of which is sold to a steam distribution system and a portion of which is used to produce electricity. Three wet scrubbers are used to control particulate matter from ash areas (ash handling area vent, ash load out area vent, and ash trommel area vent). Other equipment include three lime storage silos equipped with a common bin vent filter and one activated carbon storage silo equipped with a bin vent bag filter. The lime and carbon storage silos and ash area wet scrubbers are included in the Title V permit as insignificant activities since these sources have potential uncontrolled PM emissions less than 1.0 ton/year.

Control Devices

The MWCs are equipped with selective non-catalytic reduction (SNCR) systems for control of oxides of nitrogen (NOx), activated carbon injection (ACI) systems for control of mercury (Hg), spray dry absorbers (SDA) for control of acid gases (sulfur dioxide [SO_2] and hydrogen chloride [HCl]), and electrostatic precipitators (ESP) for control of particulate matter (PM) and MWC metals and to capture carryover carbon and lime from the ACI and SDA control systems. No tail-gas control devices are used for CO (emissions controlled by processes – i.e., combustion – controls, which are not considered to be applicable to Compliance Assurance Monitoring [CAM] requirements), so CAM is not applicable to any CO emission limitations based on 40 CFR 64.2(a)(2). The lime and carbon storage silos are vented during filling operations through fabric filter dust collectors and the ash areas are vented through wet scrubbers.

Emission Limitations

The MWCs are subject to the NSPS Subpart Cb emission limitations (adopted at COMAR 26.11.08.08A(2)), included in the current Title V Permit as Condition IV.1.1 as shown on the attached table. These NSPS Subpart Cb emission limitations were promulgated after 1990 and are thus exempt from CAM requirements under 40 CFR §64.2(b)(1)(i). The only other applicable MWC emission limitations are the original PSD Permit emission limitations for SO_2, CO, NOx, and fluorides, included in the current Title V permit as Condition IV.1.9 as shown on the attached table. Fluoride emissions are less than the major source threshold of 100 tons per year (TPY). In addition, CAM does not apply for fluorides because the PSD Permit fluoride emissions limitation is based on no controls (40 CFR §64.2(a)(2)). Although the facility wide CO PSD limit of 121 lbs/hr is exempt from CAM for the reason discussed above, a continuous determination method is included in the Title V permit. The Title V permit also specifies continuous compliance determination methods for the facility wide (combined emissions for all three units) SO_2 and NOx PSD Permit emission limitations of 375 and 298 lbs/hour respectively using continuous emission monitoring systems (CEMS). Therefore, the CO, SO_2, and NOx PSD Permit emission limitations are exempted from CAM requirements based on 40 CFR 64.2(b)(1)(vi). The lime silos and ash area wet scrubbers are insignificant activities and are thus not subject to specific permit emission limitations (other than the general COMAR requirement that uncontrolled emissions are less than 1.0 TPY).

CAM Applicability Summary

All MWC Subpart Cb emission limitations are exempted from CAM based on 40 CFR §64.2(b)(1)(i) since the Cb emissions limitations were promulgated after 1990. The CO, SO_2, and NOx PSD Permit emission limitations are also exempted from CAM by 40 CFR §64.2(b)(1)(vi) since the Title V Permit already requires continuous compliance determination methods based on CEMS and Department approved methodologies. Compliance with the PSD Permit fluoride emissions limitation does not require a control device (limit is based on no control) so CAM does not apply in accordance with 40 CFR §64.2(a)(2). Insignificant activities are not subject to CAM since there is no specific permit emission limitation for these sources (40 CFR §64.2(a)(1)) and, in any event, uncontrolled emissions are less than the major source threshold levels (40 CFR §64.2(a)(3)). Therefore, based on this CAM Plan Applicability determination, a CAM Plan is not required.

COMPLIANCE SCHEDULE

Wheelabrator Baltimore, L.P. is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable

TITLE VI – OZONE DEPLETING SUBSTANCES

Wheelabrator Baltimore, L.P. is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

Wheelabrator Baltimore, L.P. is not subject to the requirements of Section 112(r).

PERMIT SHIELD

The Wheelabrator Baltimore, L.P. facility requested that a permit shield be expressly included in the Permittee's Part 70 permit. Permit shields are granted on an emission unit by emission unit basis. If an emission unit is covered by a permit shield, a permit shield statement will follow the emission unit table in Section IV - Plant Specific Conditions of the permit. In this case, a permit shield was granted for each emission unit covered by the permit.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 1 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving:

Cummins N-855-F Diesel Engine (fire pump) rated at 240 BHP at 2100 RPM, Manufacture Date: October 1983

The installation is subject to the following requirements:

(a) COMAR 26.11.09.05E(2), Emissions During Idle Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(b) COMAR 26.11.09.05E(3), Emissions During Operating Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(c) COMAR 26.11.09.05E(4), Exceptions.

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(A) Engines that are idled continuously when not in service: 30 minutes

(B) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

(d) Requirements from 40 CFR part 63, subpart ZZZZ:

Operation and Maintenance Requirements

(i) The Permittee must comply with the requirements in item 1 of Table 2c to 40 CFR part 63, subpart ZZZZ as follows:

(A) Change oil and filter every 500 hours of operation or annually, whichever comes first.

(B) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

(C) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(D) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for

appropriate and safe loading of the engine, not to exceed 30 minutes.

(E) The Permittee may petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. **[Reference: 40 CFR §63.6602]**

(ii) The Permittee must be in compliance with the applicable requirements in 40 CFR part 63, subpart ZZZZ at all times. **[Reference: 40 CFR §63.6605(a)]**

(iii) At all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation 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, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[Reference: 40 CFR §63.6605(b)]**

(iv) The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **[Reference: 40 CFR §63.6625(e)(2)]**

(v) The Permittee must install a non-resettable hour meter if one is not already installed. **[Reference: 40 CFR §63.6625(f)]**

(vi) The Permittee must demonstrate continuous compliance with each applicable requirement in Table 2c to 40 CFR part 63, subpart ZZZZ according to methods specified in Table 6 to this subpart. **[Reference: 40 CFR §63.6640(a)]**

Table 6, item 9 (existing emergency stationary RICE ≤500 HP located at a major source of HAPs) specifies that the Permittee must operate and maintain the fire pump engine according to the

manufacturer's emission-related operation and maintenance instructions or develop and follow the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **[Reference: 40 CFR Part 63 Subpart ZZZZ Table 6]**

(vii) There is no time limit on the use of emergency stationary RICE in emergency situations. **[Reference: 40 CFR §63.6640(f)(1)]**

(viii) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. **[Reference: 40 CFR §63.6640(f)(2)(i)]**

(ix) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **[Reference: 40 CFR §63.6640(f)(3)]**

Notification and Reporting Requirements

No notification requirements under 40 CFR §63.6645 or reporting requirements under 40 CFR §63.6650.

Record Keeping Requirements

(i) The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment

control device (if any) according to the Permittee's own maintenance plan. **[Reference: 40 CFR §63.6655(e)]**

(ii) The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the Permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. **[Reference: 40 CFR §63.6655(f)]**

(iii) Records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1). **[Reference: 40 CFR §63.6660(a)]**

(iv) As specified in § 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **[Reference: 40 CFR §63.6660(b)]**

(v) The Permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). **[Reference: 40 CFR §63.6660(c)]**

(2) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(3) No. Varies Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

Parts cleaner and related containers are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(i) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(ii) COMAR 26.11.19.09D(3)(a) - (d), which requires that the Permittee implement good operating practices designed to minimize spills and

evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(iii) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

(iv) The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(A) Monthly records of the total VOC degreasing materials used; and

(B) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(4) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(5) Containers, reservoirs, or tanks used exclusively for:

(a) ____Dipping operations for applying coatings of natural or synthetic resins that contain no VOC;

(b) ____Dipping operations for coating objects with oils, waxes, or greases, and where no VOC is used;

(c) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(d) No. Varies Storage of lubricating oils;

(e) No. 4 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;

(f) No. 3 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(g) No. Varies The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(6) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(7) ✓ Natural draft hoods or natural draft ventilators that exhaust air pollutants into the ambient air from manufacturing/industrial or commercial processes;

(8) ✓ Laboratory fume hoods and vents;

(9) Any other emissions unit, not listed in this section, with a potential to emit less than the "de minimis" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 4 Storage of silos for lime and activate carbon used as reagents in air pollution control devices.

No. 3 Wet scrubbers used for ventilation of ash handling area, ash load out, and ash trammels area.

STATE ONLY ENFORCEABLE REQUIREMENTS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

   A. COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

   B. COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

   C. COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Monitoring Requirements:

   A. The Permittee shall monitor the material in its waste stream in accordance with Department approved procedures to comply with the following waste restrictions:

      i. Municipal Solid Waste may include certain `solid waste generated from industrial, institutional, and commercial facilities such as trimmings, off-specification products, and similar materials. Hazardous wastes, and infectious medical wastes must be excluded.

      ii. Infectious waste may not be stored, burned, or disposed of at this facility; and

      iii. Off-spec and outdated pharmaceuticals may be burned at the facility provided that the burning does not cause a violation of any standard or operating requirement.

3. NOx Requirements for Large Municipal Waste Combustors (Effective: 12/6/18)

   A. COMAR 26.11.08.10A, which requires owners and operators of a Large MWC to minimize NOx emissions by operating and optimizing the use of all installed pollution control technology and combustion controls consistent with the technological limitations, manufacturers' specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing

emissions (as defined in 40 CFR §60.11(d)) for such equipment and the unit at all times the unit is in operation, including periods of startup and shutdown.

B. COMAR 26.11.08.10B, as of May 1, 2019, the owner or operator of a Large MWC shall meet the following applicable NOx emission rates, except for periods of startup and shutdown:

Affected Sources	NO_x 24-hour block average emission rate
Montgomery County Resource Recovery Facility	140 ppmv
Wheelabrator Baltimore Inc.	150 ppmv

C. COMAR 26.11.08.10C, as of May 1, 2020, the owner or operator of a Large MWC shall meet the requirements of §B of this regulation and the following applicable NOx emission rates, except for periods of startup and shutdown:

Affected Sources	NO_x 30-day rolling average emission rate
Montgomery County Resource Recovery Facility	105 ppmv
Wheelabrator Baltimore Inc.	145 ppmv

D. COMAR 26.11.08.10D(2), as of May 1, 2019, a facility-wide NOx emission limit of 252 lbs/hr timed average mass loading over a 24-hour period shall apply during periods of startup and shutdown for Wheelabrator Baltimore Inc.

E. COMAR 26.11.08.10E, Additional NOx Emission Control Requirements.

i. Not later than January 1, 2020, the owner or operator of Wheelabrator Baltimore Inc. shall submit a feasibility analysis for additional control of NOx emissions from the Wheelabrator Baltimore Inc. facility to the Department. This analysis shall be prepared by an independent third party and include the following:

a. A written narrative and schematics detailing existing facility operations, boiler design, NOx control technologies, and relevant emission performance;
b. A written narrative and schematics detailing various state-of-the-art NOx control technologies for achieving additional NOx emission reductions from existing MWCs, including technologies capable of achieving NOx emission levels comparable to those for a new

source in consideration of the overall facility design at Wheelabrator Baltimore Inc.;

c. An analysis of whether each state-of-the-art control technology identified under §E(1)(b) of this regulation could technically be implemented at the Wheelabrator Baltimore Inc. facility;

d. Capital and operating costs, NOx emission benefits, and air quality impacts resulting from installation of each state-of-the-art control technology as identified under §E(1)(b) of this regulation; and

e. An estimated timeline for installation of each state-of-the-art control technology as identified under §E(1)(b) of this regulation which shall include design time, construction, operational testing, and start up.

ii. Upon written request, Wheelabrator Baltimore Inc. shall submit any other information that the Department determines is necessary to evaluate the feasibility analysis.

iii. Not later than January 1, 2020, based upon the results of the feasibility analysis as required under §E(1) of this regulation, the owner or operator of Wheelabrator Baltimore Inc. shall propose and submit a NOx 24-hour block average emission rate, NOx 30-day rolling average emission rate, and NOx mass loading emission limitation for periods of startup, shutdown and malfunction.

F. COMAR 26.11.08.10F, requires that the owner or operator of a Large MWC continuously monitor NOx emissions with a continuous emission monitoring system in accordance with COMAR 26.11.01.11.

G. COMAR 26.11.08.10G, not later than 45 days after the effective date of this regulation, the owner or operator of a Large MWC shall submit a plan to the Department and EPA for approval that demonstrates how the Large MWC will operate installed pollution control technology and combustion controls to meet the requirements of COMAR 26.11.08.10A. The plan shall summarize the data that will be collected to demonstrate compliance with COMAR 26.11.08.10A. The plan shall cover all modes of operation, including but not limited to normal operations, startup, and shutdown.

Note: The Permittee submitted the plan for approval required by Condition G on January 22, 2019.

H. COMAR 26.11.08.10H, beginning July 1, 2019, the owner or operator of a Large MWC shall submit a quarterly report to the Department containing:

i. Data, information, and calculations which demonstrate compliance with the NOx 24-hour block average emission rate as required in §B of this regulation;

ii. Data, information, and calculations, including NOx continuous emission monitoring data and stack flow data, which demonstrate compliance with the startup and shutdown mass NOx emission limits as required in §D of this regulation;

iii. Flagging of periods of startup and shutdown and exceedances of emission rates;

iv. NOx continuous emission monitoring data and total urea flow rate to the boiler averaged over a 1-hour period, in a Microsoft Excel format; and

v. Documented actions taken during periods of startup and shutdown in signed, contemporaneous operating logs.

I. COMAR 26.11.08.10I, beginning July 1, 2020, the quarterly report to be submitted pursuant to COMAR 26.11.08.10H of this regulation shall also include data, information, and calculations which demonstrate compliance with the NOx 30-day rolling average emission rate as required in COMAR 26.11.08.10C of this regulation.

J. COMAR 26.11.08.10J, no less than 2 weeks advance notice and the opportunity to observe activities shall be provided to the Department prior to any optimization procedure, including installation or operation of NO_x emission control technology, for the express purpose of complying with the requirements of COMAR 26.11.08.10E(1).

K. COMAR 26.11.08.10K, which requires compliance with the NO_x emission standards in COMAR 26.11.08.10B, C, and D shall be demonstrated with a continuous emission monitoring system.

L. COMAR 26.11.08.10M, Compliance with the NO_x Mass Loading Emission Limitation for the Wheelabrator Baltimore Inc.

i. Compliance with the NO_x mass loading emission limitation for periods of startup and shutdown in COMAR 26.11.08.10D(2) shall be demonstrated by calculating the 24-hour average of all hourly average NO_x emission concentrations from continuous emission monitoring systems.

ii. The calculations in COMAR 26.11.08.10M(1) shall utilize the applicable Prevention of Significant Deterioration calculation methodology, for all the hours during the 3-hour startup or shutdown period and the remaining 21 hours of the 24-hour period.