



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Matthew A. Beaton  
Secretary

Martin Suuberg  
Commissioner

### FINAL AIR QUALITY OPERATING PERMIT

(Administrative Amendment of MBR-95-OPP-012, Transmittal 96402)

Issued by the Massachusetts Department of Environmental Protection ("MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

**ISSUED TO ["the Permittee"]:**

Wheelabrator North Andover, Inc.  
285 Holt Road  
North Andover, MA 01845

**FACILITY LOCATION:**

Wheelabrator North Andover, Inc.  
285 Holt Road  
North Andover, MA 01845

**NATURE OF BUSINESS:**

Municipal Waste Combustor

**RESPONSIBLE OFFICIAL:**

Name: Gary Collette  
Title: Plant Manager

**INFORMATION RELIED UPON:**

Application No. MBR-95-OPP-012A  
Transmittal No. X271216

**FACILITY IDENTIFYING NUMBERS:**

SSEIS ID No. 1210261  
FMF FAC No. 132771  
FMF RO No. 162861

**STANDARD INDUSTRIAL CODE:**

(SIC): 4953

**FACILITY CONTACT PERSON:**

Name: Gary Collette  
Title: Plant Manager  
Phone: 978-688-9011

This Operating Permit expired on October 19, 2012. However, MassDEP received Wheelabrator North Andover, Inc.'s Operating Permit Renewal Application (Application MBR-95-OPP-012R, Transmittal X250597) on April 17, 2012, therefore, Wheelabrator North Andover, Inc. may continue to operate under its Application Shield in accordance with 310 CMR 7.00: Appendix C(11) until MassDEP takes final action on the Application.

For the Department of Environmental Protection, Bureau of Air & Waste

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

June 27, 2016

\_\_\_\_\_  
Susan P. Ruch  
Acting Permit Chief &  
Deputy Regional Director  
Bureau of Air & Waste

\_\_\_\_\_  
Date

## TABLE OF CONTENTS

<b>SPECIAL CONDITIONS FOR OPERATING PERMIT</b> .....	3
1. PERMITTED ACTIVITIES.....	3
2. EMISSION UNIT IDENTIFICATION.....	4
3. EXEMPT ACTIVITIES.....	4
4. APPLICABLE REQUIREMENTS.....	5
A. EMISSION LIMITS AND RESTRICTIONS.....	5
B. COMPLIANCE DEMONSTRATION.....	7
C. GENERAL APPLICABLE REQUIREMENTS.....	16
D. REQUIREMENTS NOT CURRENTLY APPLICABLE.....	16
5. SPECIAL TERMS AND CONDITIONS.....	16
6. ALTERNATIVE OPERATING SCENARIOS.....	21
7. EMISSIONS TRADING.....	21
8. COMPLIANCE SCHEDULE.....	21
<b>GENERAL CONDITIONS FOR OPERATING PERMIT</b> .....	22
9. FEES.....	22
10. COMPLIANCE CERTIFICATION.....	22
11. NONCOMPLIANCE.....	23
12. PERMIT SHIELD.....	23
13. ENFORCEMENT.....	23
14. PERMIT TERM.....	24
15. PERMIT RENEWAL.....	24
16. REOPENING FOR CAUSE.....	24
17. DUTY TO PROVIDE INFORMATION.....	24
18. DUTY TO SUPPLEMENT.....	24
19. TRANSFER OF OWNERSHIP OR OPERATION.....	25
20. PROPERTY RIGHTS.....	25
21. INSPECTION AND ENTRY.....	25
22. PERMIT AVAILABILITY.....	25
23. SEVERABILITY CLAUSE.....	25
24. EMERGENCY CONDITIONS.....	26
25. PERMIT DEVIATION.....	26
26. OPERATIONAL FLEXIBILITY.....	27
27. MODIFICATIONS.....	27
<b>APPEAL CONDITIONS FOR OPERATING PERMIT</b> .....	28

## **SPECIAL CONDITIONS FOR OPERATING PERMIT**

### **1. PERMITTED ACTIVITIES**

In accordance with the provisions of 310 CMR 7.00: Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt and insignificant activities as described in 310 CMR 7.00: Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

MassDEP has reviewed and approved the Permittee's streamlining demonstration, and has determined that the Operating Permit contains streamlined requirements that are the most stringent requirements applicable to the Permittee. Table 3 includes the streamlined emission limits/standards shown in bold face type, which subsume all applicable requirements that are at least as stringent or less stringent than the streamlined requirements. The citations to the subsumed requirements are listed under the Applicable Regulation and/or Approval Number column of Table 3.

The Permittee is subject to all applicable requirements contained in this Operating Permit, as well as, all existing regulations and Approvals subsumed in this Operating Permit. For the subsumed applicable requirements, the Permit Shield granted in General Condition 12 shall be in effect, and compliance with the streamlined requirements are deemed to also be in compliance with the subsumed requirements.

### DESCRIPTION OF FACILITY AND OPERATIONS

The Wheelabrator North Andover, Inc. facility is comprised of a municipal waste combustor (MWC) plant located at 285 Holt Road in North Andover, Massachusetts. The MWC plant consists of two identical incinerators/water wall boilers (EU1 and EU2), each capable of combusting greater than 250 tons per day of municipal solid waste (MSW). Each boiler is designed to generate 173,000 pounds per hour of steam that is delivered to a turbine generator capable of producing 40 Megawatts (MW) output of electricity for sale and distribution to the New England power grid system. Each boiler is equipped with two auxiliary burners that burn natural gas during start-up, shutdown, and malfunction periods. Each MWC train is equipped with air pollution control equipment consisting of: 1) a Selective Non-Catalytic Reduction (SNCR) system for reduction of nitrogen oxides, 2) an activated carbon injection system for control of mercury and dioxin/furan, 3) a spray dryer absorber (SDA) system with lime slurry injection for the control of acid gases, and 4) a fabric filter/bag house for the control of particulate and other pollutants. Fly ash from the MWC plant is conveyed to and conditioned by an ash handling system (EU3) prior to being transported by dump trucks to an off-site ash landfill. The MWC plant and ash handling system is subject to 310 CMR 7.08.

## 2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

Table 1 +			
EMISSION UNIT (EU#)	DESCRIPTION OF EMISSION UNIT	EU DESIGN CAPACITY	POLLUTION CONTROL DEVICE (PCD)
EU1	Mass Burn Incinerator/Water Wall Boiler	288.4 MMBTU/hr Heat Input 173,000 lbs/hr of steam @ 612 psig/750 Degrees F	Two (2) Natural Gas Fired Low NO <sub>x</sub> 40 MMBTU/hr Auxiliary Burners [AB] (PCD 1)
			Selective Non-Catalytic Reduction with Urea Injection [SNCR] (PCD 2)
			Powdered Activated Carbon Injection System [PACI] (PCD 3)
			Two-Fluid Nozzle Spray Dryer Absorber with Lime Slurry Injection [SDA] (PCD 4)
			Pulse Jet, 8 Module, Size 1615 TA Model 275, Fabric Filter [FF] (PCD 5)
EU2	Mass Burn Incinerator/Water Wall Boiler	288.4 MMBTU/hr Heat Input 173,000 lbs/hr of steam @ 612 psig/750 Degrees F	Two (2) Natural Gas Fired Low NO <sub>x</sub> 40 MMBTU/hr AB (PCD 6)
			SNCR (PCD 7)
			PACI (PCD 8)
			SDA (PCD 9)
EU3	Ash Conveying Systems and Buildings and Enclosures of Ash Conveying Systems	20,000 ACFM @ 68 Degrees F	Water Injected Centrifugal Scrubber, Tri-Mer Corp. W-200 Model H (PCD 11)
			Ash Conveyors, Buildings and Enclosures

### + Table 1 Key:

EU# = Emission Unit Number  
 PCD = Pollution Control Device  
 F = Fahrenheit  
 MMBTU/hr = million British thermal units per hour  
 @ = at  
 lbs/hr = pounds per hour  
 psig = pounds per square inch gauge  
 ACFM = Actual Cubic Feet per Minute  
 NO<sub>x</sub> = oxides of nitrogen

## 3. EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2
The list of current exempt activities is contained in the Operating Permit Application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.

#### 4. APPLICABLE REQUIREMENTS

##### A. EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the emission limits/restrictions as contained in Table 3 below:

<b>Table 3 *</b>				
EU#	RESTRICTION/ OPERATING PRACTICES	POLLUTANT	EMISSION LIMIT/STANDARD (10)	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU1, EU2	Unit Load: ≤ 110% of maximum demonstrated load (based on steam flow), calculated in 4-hour block arithmetic averages, measured during the most recent dioxin/furan compliance test in which compliance is achieved (3)  PM Control Device Inlet Temperature: ≤ 17°C (30°F) above maximum demonstrated PM control device inlet temperature, calculated in 4-hour block arithmetic averages, measured during the most recent dioxin/furan compliance test in which compliance is achieved (3)  Feed Rate or Firing Rate ≤ 66.96 tons/hour of MSW (4)	Opacity	≤ 10% (6 minute block average)	310 CMR 7.08(2)(f)2.
		Cd	≤ 0.020 mg/dscm at 7% O <sub>2</sub>	MBR-98-ECP-005
		Pb	≤ 0.440 mg/dscm at 7% O <sub>2</sub>	
		HCl	≤ 29 ppm by volume at 7% O <sub>2</sub> dry basis or 95% reduction by weight or volume, whichever is less stringent.	
		Dioxin/Furan	≤ 30 ng/dscm at 7% O <sub>2</sub>	
		PM	≤ 27 mg/dscm at 7% O <sub>2</sub> (1)	310 CMR 7.08(2)(f)2.  MBR-98-ECP-005  EPA PSD Permit No. 029-121 MA16 (5)  MBR-82-INC-004  MBR-91-INC-004
		SO <sub>2</sub>	≤ 29 ppm by volume at 7% O <sub>2</sub> dry basis or 75% reduction by weight or volume, whichever is less stringent (24-hour geometric mean)	310 CMR 7.08(2)(f)2.  MBR-98-ECP-005  EPA PSD Permit No. 029-121 MA16 (6)  MBR-82-INC-004  MBR-91-INC-004
		CO	≤ 69 ppm by volume at 7% O <sub>2</sub> dry basis at combustor outlet (4-hour block average)	310 CMR 7.08(2)(f)1.a.i.  MBR-98-ECP-005  EPA PSD Permit No. 029-121 MA16 (7)  MBR-82-INC-004  MBR-91-INC-004
		NO <sub>x</sub>	≤ 205 ppm by volume at 7% O <sub>2</sub> dry basis (24-hour daily arithmetic average)	310 CMR 7.08(2)(f)3.  MBR-98-ECP-005  EPA PSD Permit No. 029-121 MA16 (8)  MBR-82-INC-004  MBR-91-INC-004  310 CMR 7.19(9)(a)
		Hg	≤ 0.080 mg/dscm at 7% O <sub>2</sub> (during any single quarterly compliance test)	310 CMR 7.08(2)(g)2.  MBR-98-ECP-005

Table 3 <sup>+</sup>				
EU#	RESTRICTION/ OPERATING PRACTICES	POLLUTANT	EMISSION LIMIT/STANDARD (10)	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU1, EU2	Same as Above	Hg	≤ 0.028 mg/dscm at 7% O <sub>2</sub> (based on average of 4 quarterly compliance tests per rolling 12 months)	310 CMR 7.08(2)(f)2. MBR-98-ECP-005
		NH <sub>3</sub>	≤ 10 ppm by volume at 7% O <sub>2</sub> dry basis (9)	MBR-98-ECP-005 (State Only Requirement)
		H <sub>2</sub> SO <sub>4</sub>	≤ 0.02 lb/MMBTU	EPA PSD Permit No. 029-121 MA16 MBR-82-INC-004 MBR-91-INC-004
EU3	NA	Fugitive Ash	Visible emissions ≤ 9 minutes per 3 hour period (2)	310 CMR 7.08(2)(f)5. MBR-98-ECP-005

**Table 3 Notes:**

- 1 Refer to Section 5.a), "Special Terms And Conditions".
- 2 Refer to Section 5.b), "Special Terms And Conditions".
- 3 Refer to Section 5.c), "Special Terms And Conditions".
- 4 Refer to Section 5.i), "Special Terms And Conditions".
- 5 The EPA PSD Permit No. 029-121 MA16, Approval MBR-82-INC-004, and Approval MBR-91-INC-004 PM limit of 0.05 gr/dscf at 12% CO<sub>2</sub>, which is approximately equivalent to 114.3 mg/dscm at 7% O<sub>2</sub>, is less restrictive than the listed Table 3 limit, 27 mg/dscm at 7% O<sub>2</sub> (310 CMR 7.08(2)(f)2.).
- 6 The EPA PSD Permit No. 029-121 MA16, Approval MBR-82-INC-004, and Approval MBR-91-INC-004 SO<sub>2</sub> limit of 0.27 lb/MMBTU, which is approximately equivalent to 113 ppm by volume at 7% O<sub>2</sub> dry basis, is less restrictive than the listed Table 3 limit, 29 ppm by volume at 7% O<sub>2</sub> dry basis (310 CMR 7.08(2)(f)2.).
- 7 The EPA PSD Permit No. 029-121 MA16, Approval MBR-82-INC-004, and Approval MBR-91-INC-004 CO limit of 0.07 lb/MMBTU, which is approximately equivalent to 69 ppm by volume at 7% O<sub>2</sub> dry basis, is as restrictive as the listed Table 3 limit, 69 ppm by volume at 7% O<sub>2</sub> dry basis (310 CMR 7.08(2)(f)1.a.i.).
- 8 The 310 CMR 7.19(9)(a) NO<sub>x</sub> limit, 0.6 lb/MMBTU (calendar day average), or the EPA PSD Permit No. 029-121 MA16, Approval MBR-82-INC-004, and Approval MBR-91-INC-004 NO<sub>x</sub> limit of 0.6 lb/MMBTU (24-hour daily arithmetic average), which is approximately equivalent to 349 ppm by volume at 7% O<sub>2</sub> dry basis, is less restrictive than the listed Table 3 limit, 205 ppm by volume at 7% O<sub>2</sub> dry basis (24-hour daily arithmetic average) (310 CMR 7.08(2)(f)3.).
- 9 Refer to Section 5.d), "Special Terms and Conditions".
- 10 Emission limits/standards in Table 3 and under 310 CMR 7.08 apply at all times except during periods of start-up, shutdown or malfunction as defined in 40 CFR Part 60, Subpart Eb, 60.58b, as amended.

**+ Table 3 Key:**

EU# = Emission Unit Number  
 mg/dscm = milligram per dry standard cubic meter  
 ng/dscm = nanogram per dry standard cubic meter  
 ppm = parts per million  
 lb/MMBTU = pounds per million British Thermal Units

gr/dscf = grains per dry standard cubic foot  
 g/dscm = gram per dry standard cubic meter  
 MSW = Municipal Solid Waste  
 Cd = Cadmium  
 Pb = Lead  
 HCl = Hydrogen Chloride  
 Dioxin/Furan = tetra- through octa- chlorinated dibenzo-p-dioxins  
 and dibenzofurans  
 PM = Particulate Matter  
 SO<sub>2</sub> = Sulfur Dioxide  
 CO = Carbon Monoxide  
 NO<sub>x</sub> = Nitrogen Oxides  
 Hg = Mercury  
 NH<sub>3</sub> = Ammonia  
 H<sub>2</sub>SO<sub>4</sub> = Sulfuric Acid Mist  
 O<sub>2</sub> = Oxygen  
 CO<sub>2</sub> = Carbon Dioxide  
 % = percent  
 °C = Degrees Centigrade  
 °F = Degrees Fahrenheit  
 ≤ = less than or equal to  
 NA = Not Applicable

**B. COMPLIANCE DEMONSTRATION**

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C(9) and (10), as well as the applicable requirements contained in Table 3:

<b>Table 4</b>	
EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2	1. As required by 310 CMR 7.08(2)(g), the facility shall comply with the provisions of 40 CFR 60.58b, "Compliance and Performance Testing", as amended, the provisions of which are hereby incorporated by reference. Compliance with the applicable requirements as set forth in 310 CMR 7.08(2)(f) and Section 4 of this Operating Permit, shall be determined in accordance with 40 CFR 60.58b, except as provided under 310 CMR 7.08(2)(g)1., 2., 3., 4., 5., and 6., and as specified within this Operating Permit.

**Table 4**

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2	<p>2. The facility shall conduct compliance tests for dioxin/furan emissions according to one of the schedules specified below, as required by 310 CMR 7.08(2)(g)1.a. and b.:</p> <p>a. The facility shall conduct compliance testing for dioxin/furan emissions on all municipal waste combustor unit(s) on a nine month basis, or</p> <p>b. For municipal waste combustor unit(s) where all compliance tests for all unit(s) over a 27 month period indicate that dioxin/furan emissions are less than or equal to 7 nanograms per dry standard cubic meter total mass (ng/dscm), corrected to 7 percent oxygen, the facility may elect to conduct compliance tests for one unit every nine months.</p> <p>At a minimum, a compliance test for dioxin/furan emissions shall be conducted every nine months following the previous compliance test for one unit at the municipal waste combustor plant. Every nine months a different unit at the municipal waste combustor plant shall be tested, and the units at the plant shall be tested in sequence.</p> <p>The facility may continue to conduct compliance testing on only one unit per nine month basis so long as the dioxin/furan emissions remain less than or equal to 7 ng/dscm @ 7% O<sub>2</sub>.</p> <p>If any nine month compliance test indicates dioxin/furan emissions greater than the specified limit, compliance tests shall thereafter be conducted on all units at the plant every nine months until and unless all nine month compliance tests for all units at the plant over a 27 month period indicate dioxin/furan emissions less than or equal to the 7 ng/dscm @ 7% O<sub>2</sub>.</p> <p>3. In accordance with 310 CMR 7.08(2)(g)1.d., for municipal waste combustor units where carbon injection (or equivalent) is used to comply with the dioxin/furan emission limits specified in 310 CMR 7.08(2)(f)2. or the dioxin/furan emission limit specified in 310 CMR 7.08(2)(g)1.b, the facility shall measure and calculate the carbon (or equivalent) usage rate following the procedures specified in 40 CFR 60.58b(m), as amended.</p> <p>4. In accordance with 310 CMR 7.08(2)(g)2., compliance testing for Hg shall be conducted on all municipal waste combustor unit(s) on a quarterly basis. Compliance with the emissions limit specified in 310 CMR 7.08(2)(f) 2. shall be based on the average of four quarterly compliance tests per rolling twelve months but shall not exceed 0.080 mg/dscm in any quarterly test.</p> <p>If compliance with the Hg emission limit has been achieved in each quarter for eight consecutive quarters, the facility may elect to perform compliance testing on a nine month basis. Any municipal waste combustor unit(s) that cannot achieve compliance with the emission limitation in 310 CMR 7.08(2)(f)2. during the nine month compliance test shall resume quarterly compliance testing as specified above.</p>



**Table 4**

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2	<p>5. In accordance with 310 CMR 7.08(2)(g)3., for municipal waste combustor unit(s) which employ a carbon injection (or equivalent) Hg emission control system, the facility shall conduct optimization tests. These tests will determine the optimum feed rate for the Hg emissions control apparatus by determining the carbon (or equivalent) feed rate at which the emissions of Hg are equal to or less than the applicable limit at 310 CMR 7.08(2)(f)2. The optimization test shall be conducted as follows:</p> <p>a. The optimization tests shall be performed after a change in carbon (or equivalent), upon request by MassDEP, upon request by the facility, or annually if required under 310 CMR 7.08(2)(g)4.</p> <p>b. If there are identical municipal waste combustor units at the municipal waste combustor plant, then optimization tests may be performed on one unit, and the resulting parameters applied to the other unit(s), which is identical to that unit at that plant.</p> <p>c. Within 30 calendar days of the conclusion of any optimization test, the facility shall submit to MassDEP for approval a proposed optimized carbon (or equivalent) feed rate that minimizes Hg emissions. An approvable feed rate is the feed rate such that a higher feed rate achieves insignificant additional reductions in Hg emissions compared to the amount of carbon (or equivalent) added. The carbon (or equivalent) feed rate approved by MassDEP shall be used to operate the carbon injection (or equivalent) Hg control system until the next optimization test is performed and the feed rate approved.</p> <p>6. In accordance with 310 CMR 7.08(2)(g)6., the facility shall conduct compliance testing every nine months for each municipal waste combustor unit. Compliance testing for dioxin/furan and Hg shall be conducted as specified in 310 CMR 7.08(2)(g)1. and 2.</p> <p>7. In accordance with Approval MBR-82-INC-004, each unit shall be equipped with an approved smoke density indicator, alarm and recorder that is properly installed, maintained, and continuously operated. The use of COMS operated in accordance with 310 CMR 7.08(2) shall be deemed compliance with this requirement.</p> <p>8. In accordance with Approval MBR-98-ECP-005, the facility shall conduct compliance testing for NH<sub>3</sub> every nine months for each municipal waste combustor unit. Said testing shall be conducted in accordance with a test protocol, which has been submitted to MassDEP at least 60 days prior to the anticipated date of testing, and approved by MassDEP prior to testing. Compliance with the NH<sub>3</sub> emission limit/standard shall be based upon a minimum of 3 compliance test runs on each MWC unit per compliance test, measured at the Spray Dryer Absorber inlet or Fabric Filter outlet, using EPA Test Method 26A or other test method approved by MassDEP. (State Only Requirement)</p> <p>9. In accordance with 310 CMR 7.08(2)(g)5.a. (further clarified in a letter dated October 1, 1998 from MassDEP's Business Compliance Division), Continuous Emissions Monitoring Systems (CEMS) which monitor NO<sub>x</sub>, SO<sub>2</sub>, and operating practices parameters (e.g., CO, unit load and PM control device inlet temperature) shall obtain at a minimum valid continuous emissions monitoring system data for 75% of the operating hours per day (18 hours per day) for 75% of the days per month (23 days/month for a 30 day month) that a municipal waste combustor unit is combusting solid waste continuously (24 hours/day) and valid CEMS data must be obtained for 90% of the hours per quarter that the municipal waste combustor unit is combusting municipal solid waste.</p> <p>10. In accordance with 310 CMR 7.08(2)(g)5.b., CO CEMS installed and operated in accordance with Performance Specification 4 of 40 CFR Part 60, Appendix B, will satisfy the requirements in 310 CMR 7.08(2)(g), EPA PSD Permit No. 029-121 MA16, Approval MBR-91-INC-004, and Approval MBR-82-INC-004.</p>

<b>Table 4</b>	
EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2	<p>11. The nine month compliance demonstration for the opacity limit required under 310 CMR 7.08(2)(g)(6) may be conducted using either data from the continuous opacity monitoring system (COMS) or the procedures in 40 CFR Part 60, Appendix A, Method 9 as provided for under 40 CFR 60.58b(c)(6) and 40 CFR 60.11(e)(6).</p> <p>12. In accordance with EPA PSD Permit No. 029-121 MA16, EPA Consent Agreement and Order Docket No. CAA-1-99-0017, and consistent with Approval MBR-82-INC-004, monitor the feed rate or firing rate of MSW (See Section 5.(i) "Special Terms And Conditions").</p>
EU3	<p>13. As required by 310 CMR 7.08(2)(g) and Approval MBR-98-ECP-005, the facility shall comply with the provisions of 40 CFR 60.58b, "Compliance and Performance Testing", as amended, the provisions of which are hereby incorporated by reference. Compliance with the fugitive ash requirements as set forth in 310 CMR 7.08(2)(f)5 and Section 4 of this Operating Permit, shall be determined in accordance with 40 CFR 60.58b. Fugitive ash emissions shall be tested every nine months in accordance with 310 CMR 7.08(2)(g) requirements.</p>
Facility-Wide	<p>14. In accordance with 310 CMR 7.13(1), any person owning, leasing, operating or controlling a facility for which MassDEP has determined that stack testing is necessary to ascertain compliance with MassDEP's regulations or design approval provisos shall cause such stack testing:</p> <p>(a) to be conducted by a person knowledgeable in stack testing,</p> <p>(b) to be conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and</p> <p>(c) to be conducted in the presence of a representative of MassDEP when such is deemed necessary.</p> <p>15. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., conduct any other testing or testing methodology if and when requested by MassDEP or EPA.</p> <p>16. Monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.</p>

<b>Table 5</b>	
EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2	<p>1. In accordance with 310 CMR 7.08(2)(h)9., the results of all nine month compliance tests conducted to determine compliance with the PM, opacity, Cd, Pb, Hg, dioxin/furan, HCl, and fugitive ash emission limits shall be recorded along with supporting calculations and submitted to MassDEP within 90 days after the test. In addition, in accordance with Approval MBR-98-ECP-005, the results of the quarterly Hg compliance tests shall also be recorded and submitted to MassDEP within 30 days after the test.</p> <p>Furthermore, in accordance with Approval MBR-98-ECP-005, the results of all nine month compliance tests conducted to determine compliance with the NH<sub>3</sub> emission limit shall be recorded along with supporting calculations and submitted to MassDEP within 90 days after the test. (State Only Requirement)</p> <p>2. During all dioxin/furan compliance tests, the maximum demonstrated municipal waste combustor load and maximum PM control device temperature averages (for each PM control device) shall be recorded along with supporting calculations, as required by 310 CMR 7.08(2)(h)10.</p>

**Table 5**

EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2	<p>3. As required by 310 CMR 7.08(2)(h)4., municipal waste combustor unit(s) that apply carbon (or equivalent) for Hg or dioxin/furan control, shall maintain the following records:</p> <p>a. The average carbon (or equivalent) mass feed rate (in lbs/hr) estimated as required under 40 CFR 60.58b(m)(1)(i), as amended, during all compliance tests, with supporting calculations.</p> <p>b. The average carbon (or equivalent) mass feed rate (in lbs/hr) estimated for each hour of operation as required under 40 CFR 60.58b(m)(1)(ii), as amended, during the initial dioxin/furan performance test and all subsequent nine month compliance tests, with supporting calculations.</p> <p>c. The average carbon (or equivalent) mass feed rate (in lbs/hr) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii), as amended, with supporting calculations.</p> <p>d. The total carbon (or equivalent) usage for each calendar quarter estimated as specified under 40 CFR 60.58b(m)(3), as amended, with supporting calculations.</p> <p>e. The carbon (or equivalent) injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon (or equivalent) feed rate.</p> <p>4. As required by 310 CMR 7.08(2)(h)13., for municipal waste combustor units that apply carbon (or equivalent) for Hg or dioxin/furan control:</p> <p>a. Identification of the calendar dates when the average carbon (or equivalent) mass feed rates recorded under 310 CMR 7.08(2)(h)4.c. were less than either of the hourly carbon feed rates estimated during compliance tests for Hg or dioxin/furan emissions and recorded under 310 CMR 7.08(2)(h) 4. a. or b., respectively, with reasons for such feed rates and a description of corrective actions taken.</p> <p>b. Identification of the calendar dates when the carbon injection (or equivalent) system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate (or equivalent) recorded under 310 CMR 7.08(2)(h) 4. e., are below the level(s) estimated during the compliance tests as specified in 40 CFR 60.58b(m)(1)(i) and 60.58b(m)(1)(ii), as amended, with reasons for such occurrences and a description of corrective actions taken.</p>

**Table 5**

EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2	<p>5. In accordance with 310 CMR 7.08(2)(h)2., the facility shall record the emission concentrations and parameters measured using continuous emissions monitoring systems. The measurements specified below shall be recorded and shall be available for submittal to MassDEP or for onsite review by an inspector:</p> <ul style="list-style-type: none"> <li>a. All 6-minute block averages of opacity levels as specified under 40 CFR 60.58b(c), as amended, including the highest level measured.</li> <li>b. All 1-hour block averages of SO<sub>2</sub> emission concentrations as specified under 40 CFR 60.58b(e), as amended.</li> <li>c. All 1-hour block averages of NO<sub>x</sub> emission concentrations as specified under 40 CFR 60.58b(h), as amended.</li> <li>d. All 1-hour block averages of CO emission concentrations, municipal waste combustor unit load measurements, and PM control device inlet temperatures as specified under 40 CFR 60.58b(i), as amended.</li> <li>e. All 24-hour daily geometric averages of SO<sub>2</sub> emission concentrations and all 24-hour daily geometric averages of percent reductions in SO<sub>2</sub> emissions as applicable, as specified under 40 CFR 60.58b(e), as amended, including the highest level recorded.</li> <li>f. All 24-hour daily arithmetic averages of NO<sub>x</sub> emission concentrations as specified under 40 CFR 60.58b(h), as amended, including the highest level recorded.</li> <li>g. All 4-hour block averages of CO emission concentrations, as applicable, as specified under 40 CFR 60.58b(i), as amended, including the highest level recorded.</li> <li>h. All 4-hour block arithmetic averages of municipal waste combustor unit load levels (steam flow) and PM control device inlet temperatures as specified under 40 CFR 60.58b(i), as amended, including the highest level recorded.</li> </ul> <p>6. As required by 310 CMR 7.08(2)(h)3., the facility shall record the calendar dates when any of the average emissions concentrations or percent reductions, or operating parameters recorded under 310 CMR 7.08(2)(h)2., exceed the applicable limits, with detailed specific reasons for such exceedances and a description of corrective actions taken.</p> <p>7. As required by 310 CMR 7.08(2)(h)5., the facility shall record the calendar dates and time periods for which the minimum number of hours of any of the data specified below have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken:</p> <ul style="list-style-type: none"> <li>a. SO<sub>2</sub> emissions data,</li> <li>b. NO<sub>x</sub> emissions data,</li> <li>c. CO emissions data,</li> <li>d. Municipal waste combustor unit load data,</li> <li>e. PM control device inlet temperature data.</li> </ul> <p>8. As required by 310 CMR 7.08(2)(h)6., the facility shall record each occurrence that SO<sub>2</sub> emissions data, NO<sub>x</sub> emissions data, or operational data (e.g. CO emissions, unit load, and PM control device inlet temperature) have been excluded from the calculation of average emission concentrations or parameters, along with detailed and specific reasons for excluding the data.</p> <p>9. As required by 310 CMR 7.08(2)(h)7., the facility shall record the results of daily drift tests and quarterly accuracy determinations for SO<sub>2</sub>, NO<sub>x</sub>, and CO continuous emission monitoring systems, as required under 40 CFR, Part 60, Appendix F, Procedure 1.</p>

**Table 5**

EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2	<p>10. As required by 310 CMR 7.08(2)(h)8., the facility shall maintain records of each occurrence of a start-up, shut-down or malfunction that results in an exceedance of the limits defined in Table 3, including the specific reasons for each occurrence, date, time, and unit involved. Average emissions concentrations or percent reductions, or operating parameters recorded under 310 CMR 7.08(2)(h)2., shall be recorded during start-up, shut-down or malfunction that results in an exceedance of the limits defined in Table 3.</p> <p>11. In accordance with 310 CMR 7.08(2)(h)11., the facility shall maintain records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who are certified by ASME (Operator Certification and Provisional Certification), including the dates of initial and renewal certifications and documentation of current certification.</p> <p>The facility shall also maintain records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course if required.</p> <p>12. In accordance with 310 CMR 7.08(2)(h)12., the facility shall maintain records showing the names of the persons who have completed a review of the operating manual as required by 310 CMR 7.08(2)(f)6.d., including the date of the initial review and subsequent annual reviews.</p> <p>13. In accordance with 310 CMR 7.08(2)(h)1., the facility shall maintain the calendar date of each record required above.</p> <p>14. In accordance with EPA PSD Permit No. 029-121 MA16, EPA Consent Agreement and Order Docket No. CAA-1-99-0017, and consistent with Approval MBR-82-INC-004, the facility shall maintain records of the feed rate or firing rate of MSW (See Section 5.(i) "Special Terms And Conditions").</p>
EU3	<p>15. In accordance with 310 CMR 7.08(2)(h)9. and Approval MBR-98-ECP-005, maintain records of the results of all nine month compliance tests conducted to determine compliance with the fugitive ash emission limit, along with supporting calculations.</p>
Facility-wide	<p>16. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., maintain the test results of any other testing or testing methodology required by MassDEP or EPA.</p> <p>17. Maintain records for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.</p> <p>18. Keep copies of Source Registration/Emission Statement Forms submitted annually to MassDEP as required per 310 CMR 7.12(3)(b).</p> <p>19. In accordance with 310 CMR 7.08(2)(h) and 310 CMR 7.00: Appendix C(10)(b), maintain records of all monitoring data and supporting information required by this Operating Permit on site for five (5) years from the date of the monitoring sample, measurement, report or initial Operating Permit Application. Said records shall be made available to MassDEP personnel upon request.</p>

**Table 6**

EU#	REPORTING REQUIREMENTS
EU1, EU2	<p>1. As required by 310 CMR 7.08(2)(i), the facility shall submit an annual report of the information specified in 310 CMR 7.08(2)(i)1., as applicable. The facility which elects to follow the compliance testing schedule specified in 310 CMR 7.08(2)(g)1.b., shall follow the procedures specified in 310 CMR 7.08(2)(i)1. for reporting the selection of this schedule.</p> <p>Annual Reporting Requirements <sup>1</sup> - The information specified in a. through g. below shall be reported:</p> <p>a. 310 CMR 7.08(2)(h)2.a., e. through h. for the highest emission levels recorded.</p> <p>b. 310 CMR 7.08(2)(h)4.a. and b.</p> <p>c. 310 CMR 7.08(2)(h)5. - 6.</p> <p>d. 310 CMR 7.08(2)(h)8. - 10.</p> <p>e. Summary of a. through d. for the previous year.</p> <p>f. The performance evaluation of the continuous emission monitoring system using the applicable performance specifications in Appendix B of 40 CFR, Part 60.</p> <p>g. A notification of intent to begin the reduced dioxin/furan compliance testing schedule specified in 310 CMR 7.08(2)(g)1.b. during the following calendar year.</p> <p>2. The facility shall submit a semiannual report that includes the information specified in 310 CMR 7.08(2)(i)2. for any recorded pollutant or parameter that does not comply with the emission limits as set forth in 310 CMR 7.08(2).</p> <p>Semi-Annual Reporting Requirements <sup>2</sup> - The information specified in a. through e. below shall be reported:</p> <p>a. 310 CMR 7.08(2)(h)2.a., e. through h. for each date recorded in 310 CMR 7.08(2)(h)3.</p> <p>b. 310 CMR 7.08(2)(h)3.</p> <p>c. 310 CMR 7.08(2)(h)4.c.</p> <p>d. 310 CMR 7.08(2)(h)9.</p> <p>e. 310 CMR 7.08(2)(h)13.</p> <p>3. As required by 310 CMR 7.08(2)(i), in meeting the reporting requirements of 310 CMR 7.08(2)(i)1. and 310 CMR 7.08(2)(i)2., the facility shall report the information in a format determined by MassDEP that is designed to be understandable and informative to the public. The information shall be submitted in written format and electronic format.</p>

<b>Table 6</b>	
EU#	REPORTING REQUIREMENTS
EU1, EU2	<p>4. In accordance with Approval MBR-82-INC-004, the facility shall submit to MassDEP, CEMS Excess Emission and Monitoring System Performance reports on a quarterly basis for opacity, SO<sub>2</sub>, NO<sub>x</sub>, and CO. Such reports shall include:</p> <p>a. the date and time of commencement and completion of each period of excess emissions and the magnitude of the excess emissions for each hour; and,</p> <p>b. identification of the suspected reason for the excess emissions and any corrective action taken; and,</p> <p>c. the date and time that any CEMS stopped collecting valid data and when it started to collect valid data again, except for zero and span checks (report only invalid one hour data averages); and,</p> <p>d. the nature and date of system repairs.</p> <p>In the event none of the above items have occurred, such information shall be stated in the report.</p> <p>Reportable excess emissions shall be defined as emissions in excess of the emission limits/standards defined in Table 3. The facility may use the reporting format required by 310 CMR 7.08 or some other format determined by MassDEP that is designed to be understandable and informative to the public.</p> <p>The report for each calendar quarter shall be submitted by the thirtieth (30th) day of April, July, October, and January covering the previous calendar periods of January through March, April through June, July through September, and October through December, respectively.</p> <p>5. In accordance with EPA PSD Permit No. 029-121 MA16, EPA Consent Agreement and Order Docket No. CAA-1-99-0017, and consistent with Approval MBR-82-INC-004, the facility shall submit to MassDEP on a quarterly basis a report containing either a listing of each occasion when the maximum allowed feed rate or firing rate of MSW was exceeded, or a statement that the allowed firing rate was not exceeded. The report for each calendar quarter shall be submitted by the thirtieth (30th) day of April, July, October, and January covering the previous calendar periods of January through March, April through June, July through September, and October through December, respectively. These quarterly reports may be submitted concurrently with the quarterly reports required as per Table 6, Item 4.</p>
Facility-Wide	<p>6. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., submit the test results of any other testing or testing methodology required by MassDEP or EPA.</p> <p>7. Submit a Source Registration/Emission Statement Form to MassDEP on an annual basis as required by 310 CMR 7.12.</p> <p>8. Submit by January 30 and July 30 for the previous six months respectively, a summary of all monitoring data and related supporting information to MassDEP as required by 310 CMR 7.00: Appendix C(10)(c).</p> <p>9. Submit Annual Compliance report to MassDEP and EPA by January 30 of each year and as required by General Condition 10.</p> <p>10. Promptly report to MassDEP all instances of deviations from Permit requirements by telephone or fax, within three days of discovery of such deviation, as provided in 310 CMR 7.00: Appendix C(10)(f). (See General Condition 25).</p> <p>11. All required reports must be certified by a responsible official as provided in 310 CMR 7.00: Appendix C(10)(h).</p>

**Table 6 Notes:**

- 1 In accordance with 310 CMR 7.08(2)(i)1., annual reports shall be submitted to this Office no later than February 15 of each year following the calendar year

in which the data was collected.

- 2 Semiannual reports shall be submitted according to the schedule specified: (1) If data reported in accordance with 310 CMR 7.08(2)(i)2 were collected during the first calendar half, then the report shall be submitted on or before August 1 following the first calendar half; (2) If data reported in 310 CMR 7.08(2)(i)2 were collected during the second calendar half, then the report shall be submitted on or before February 15 following the second calendar half.

These semiannual reports submitted as per 310 CMR 7.08(2)(i)2. can meet the intent of the semiannual reports required under 310 CMR 7.00 Appendix C(10)(c) provided they meet the requirements of General Condition 10.b. That is, the semiannual reports shall be submitted by January 30 and July 30 to MassDEP and contain the information as specified in General Condition 10.b. and 310 CMR 7.08(2)(i)2.

- 3 Include only the reports that document emission levels that were above the applicable requirements and the corrective actions taken.

#### C. GENERAL APPLICABLE REQUIREMENTS

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et. seq. and 310 CMR 8.00 et. seq., when subject.

#### D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7	
REGULATION	DESCRIPTION
310 CMR 7.16	Reduction or Single Occupant Commuter Vehicle Use
42 U.S.C. 7401, §112(r)	Prevention of Accidental Releases
40 CFR Part 60, Subpart Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

### 5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to the following special provisions that are not contained in Tables 3, 4, 5, and 6:

- a) In accordance with 310 CMR 7.08(1)(g), no person shall cause, suffer, allow, or permit emissions from any incinerator of any particles that have a dimension greater than 100 microns. (State Only Requirement)
- b) No person subject to 310 CMR 7.08(2) shall cause, suffer, allow or permit the discharge into the atmosphere of any visible emissions of combustion ash from an ash conveying system (including transfer points) in excess of 5 percent of the observation period (nine minutes per three hour period). This emission limit does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however the emission limit does apply to visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems. This subsection does not apply during maintenance and repair of ash conveying systems. Maintenance and repair of the ash conveying systems must be done in accordance with best management practices.
- c) No person subject to 310 CMR 7.08(2) shall:
1. cause, suffer, allow or permit a municipal waste combustor unit



to operate at a load level (based on steam flow) greater than 110 percent of the maximum demonstrated municipal waste combustor unit load calculated in 4-hour block arithmetic averages, measured during the most recent dioxin/furan compliance test in which compliance is achieved; and

2. cause, suffer, allow or permit a municipal waste combustor unit to operate at a temperature, measured at the PM control device inlet, exceeding 17°C (30°F) above the maximum demonstrated PM control device temperature, calculated in 4-hour block arithmetic averages, measured during the most recent dioxin/furan compliance test in which compliance is achieved.

During any nine month dioxin/furan compliance test and the 2 weeks preceding each nine month dioxin/furan compliance test, municipal waste combustor unit load limit and PM control device temperature limitations are not applicable.

Municipal waste combustor unit load limit and PM control device temperature limitations may be waived, if prior approval is granted by MassDEP, for the purposes of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance provided that there is an improvement in controlling air pollution, or advancing the state-of-the-art for controlling facility emissions.

Emission limits apply at all times except during periods of start-up, shutdown or malfunction as defined in 40 CFR Part 60.58b, as amended.

- d) In accordance with Approval MBR-98-ECP-005, based on the current NO<sub>x</sub> limit of 205 ppm by volume at 7% O<sub>2</sub> dry basis, NH<sub>3</sub> emissions from each MWC unit shall be limited to 10 ppm by volume at 7% O<sub>2</sub> dry basis. Compliance with the NH<sub>3</sub> emission limit/standard shall be based on a minimum of 3 compliance test runs on each MWC unit per compliance test, measured at the Spray Dryer Absorber inlet or Fabric Filter outlet, using EPA Test Method 26A or other test method approved by MassDEP. (State Only Requirement)
- e) In accordance with Approval MBR-98-ECP-005, the facility shall not combust sewage sludge in any of the municipal waste combustor units.
- f) In accordance with 310 CMR 7.08(2)(f)6. and 40 CFR Part 60, Subpart Eb, 60.54b, as amended, the facility shall implement the following municipal waste combustor operator training and certification requirements:
  1. The facility shall have each chief facility operator and shift supervisor obtain and maintain an Operator Certificate issued by the American Society of Mechanical Engineers (ASME).
  2. The facility shall not allow the municipal waste combustor unit to be operated at any time unless one of the following persons is on duty: A chief facility operator or a shift supervisor who has obtained an Operator Certificate. (A Provisional Certificate is acceptable provided the supervisor is scheduled to obtain an Operator Certificate in accordance with 310 CMR 7.08(2)(f). A provisionally certified operator who is newly promoted or recently transferred to a chief facility operator or a shift supervisor position may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, MassDEP or EPA for up to six (6) months before taking the ASME certification exam.). If one of the persons listed above must leave the municipal waste combustor plant during his or her operating shift, a provisionally certified control room operator who is onsite at the municipal waste combustor plant may fulfill these requirements subject to

40 CFR Part 60, Subpart Eb, 60.54b, as amended.

When the certified chief facility operator or certified shift supervisor is off site for twelve (12) hours or less, and no certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, MassDEP or EPA.

When the certified chief facility operator or certified shift supervisor is off site for more than twelve (12) hours, but for two (2) weeks or less, and no certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, MassDEP or EPA. However, the facility owner or operator shall record the period when the certified chief facility operator or certified shift supervisor are off site and include that information in the annual report as specified under 40 CFR Part 60, Subpart Eb, 60.59b(g)(5), as amended, and 310 CMR 7.08(2)(i)1..

When the certified chief facility operator or certified shift supervisor is off site for more than two weeks, and no other certified operator is onsite, the provisionally certified control room operator may perform those duties without approval by MassDEP or EPA. However, the facility must take the following two actions:

- i. MassDEP and EPA must be notified in writing. In the notice, the reasons that caused the absence and the actions being taken to ensure that a certified chief facility operator or certified shift supervisor is on site as expeditiously as practicable must be included.
  - ii. A written status report and corrective action summary must be submitted to MassDEP and EPA every four weeks following the initial notification. The facility shall include in each status summary a demonstration that a good faith effort has been made and continues to be made to ensure that a certified chief facility operator or certified shift supervisor is on site. If MassDEP or EPA provides notice that the status report or corrective action summary is disapproved, the MWC unit may continue operation for ninety (90) days, but then must cease operation. If corrective actions are taken in the ninety (90) day period such that MassDEP or EPA withdraws the disapproval, MWC unit operation may continue.
3. The facility shall have all chief facility operators, shift supervisors, and control room operators who have not obtained an Operator Certificate from ASME complete the National Technical Information Service - "EPA Municipal Waste Combustor Operating Course".
  4. The facility shall establish a training program to review the operating manual with each person who has responsibilities affecting the operation of an affected municipal waste combustor unit, including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers. Each person specified above shall undergo initial training no later than the date prior to the day the person assumes responsibilities affecting municipal waste combustor unit operation and annually thereafter. The site-specific operating manual shall be updated on a yearly basis and shall address at a minimum the following:
    - i. A summary of all applicable requirements in this regulation;
    - ii. Basic combustion theory applicable to a municipal waste combustor unit;
    - iii. Procedures for receiving, handling, and feeding municipal

- iv. solid waste;
- iv. Municipal waste combustor unit startup, shutdown, and malfunction procedures;
- v. Procedures for maintaining proper combustion air supply levels;
- vi. Procedures for operating the municipal waste combustor unit within the requirements established under this regulation;
- vii. Procedures for responding to periodic upset or off-specification conditions;
- viii. Procedures for minimizing PM carryover;
- ix. Procedures for handling ash;
- x. Procedures for monitoring municipal waste combustor unit emissions;
- xi. Reporting and record keeping procedures.

5. The facility shall, upon request from MassDEP or EPA, make available all the operating manuals and records of training for inspection.

- g) In accordance with 310 CMR 7.08(2)(j)5. and Approval MBR-98-ECP-005, additional requirements may be included in an Emission Control Plan Approval if MassDEP determines that the emissions from a municipal waste combustor plant's unit(s) alone or cumulatively with other municipal waste combustor plant's unit(s) cause or contribute to a condition of air pollution or a violation of any other regulation. Such requirements would not be federally enforceable and would be subject to State enforcement only. These requirements could include but are not limited to emissions limits on air contaminants, and additional stack testing or emission monitoring requirements.

MassDEP may modify the Emission Control Plan at any time if MassDEP determines that a municipal waste combustor plant's unit(s) alone or cumulatively with other municipal waste combustor plant's unit(s) cause or contribute to a condition of air pollution or a violation of any other regulation.

Cumulative Impact: MassDEP has assessed the cumulative impact of other municipal waste combustors within the vicinity of the municipal waste combustor facility. The analyses indicated that the subject municipal waste combustor facility would not alone or cumulatively with any other municipal waste combustor facility cause or contribute to a condition of air pollution.

- h) In accordance with 310 CMR 7.08(2)(a) and Approval MBR-98-ECP-005, no person shall allow, or permit the construction, substantial reconstruction, alteration or operation of a municipal waste combustor unit on a site which has not received a site assignment in accordance with M.G.L. c.111, s.150A. (State Only Requirement)
- i) In accordance with Approval MBR-82-INC-004, the facility's maximum feed rate or firing rate shall not exceed 66.96 tons of Municipal Solid Waste (MSW) per hour. The facility shall determine compliance with the facility's maximum feed rate or firing rate by monitoring and recording the firing rate using the method set out in Attachment A of the EPA Consent Agreement and Order Docket No. CAA-1-99-0017, and as specified below.

Total MSW feed rate (tons/hr) shall be continuously monitored by continuously monitoring and recording total boiler steam flow (Klb/hr) in accordance with the following procedure:

A 30-day rolling average boiler evaporation rate  $\left( \frac{\text{Klb} - \text{Steam}}{\text{Ton} - \text{MSW}} \right)$  will be calculated daily in accordance with the following equation:

$$30 \text{ Day Rolling Evaporation Rate} \left( \frac{\text{Klb} - \text{Steam}}{\text{Ton} - \text{MSW}} \right) = \frac{30 \text{ Day Steam Total (Klb)}}{30 \text{ Day MSW Processed (Tons)}}$$

The 30-day rolling average evaporation rate will be calculated based on 30-day rolling total facility steam production (Klbs) and concurrent 30-day rolling total facility MSW processed (Tons). Thirty-day rolling average total boiler steam flow (Klbs) will be calculated from boiler steam flow totalizers. Thirty-day rolling average facility MSW processed total (tons) will be calculated as follows:

Day 1 Inventory (Tons) - Day 30 Inventory (Tons) + 30 Day Scale House Receipts (Tons) = Total MSW Processed (Tons)

A new total steam flow surrogate limit (Klb/hr) will be determined daily based on the 66.96 tons/hour MSW feed rate limit using the 30-day rolling average evaporation rate. This surrogate total steam flow limit (Klb/hr) will be used to ensure the maximum hourly charging rate (tons/hr) is not exceeded.

$$\text{Surrogate Steam Limit} \frac{\text{Klbs}}{\text{Hour}} = 66.96 \frac{\text{Tons}}{\text{Hour}} \times \text{Evaporation Rate} \frac{\text{Klb} - \text{Steam}}{\text{Ton} - \text{MSW}}$$

The 30-day rolling facility steam flow total (Klb), total MSW processed (tons), evaporation rate  $\left( \frac{\text{Klb} - \text{Steam}}{\text{Ton} - \text{MSW}} \right)$ , and surrogate steam

flow limit (Klb/hr) must be calculated daily and recorded. These records must be maintained on site for five years pursuant to 310 CMR 7.00: Appendix C(10)(b) and be available for inspection.

Steam flow meters will be calibrated annually in accordance with requirements under 40 CFR 60.58b(i)(6). Calibration records will be maintained on site for five years pursuant to 310 CMR 7.00: Appendix C(10)(b) and be available for inspection.

- j) Consistent with Approval MBR-82-INC-004, the facility shall provide sampling ports for particulate emissions testing downstream of the Fabric Filters/Baghouses, and permanent test platforms and access ladders when such testing is to occur at an elevated point on the stack.
- k) In accordance with EPA PSD Permit No. 029-121 MA16, the facility shall comply with all applicable state and federal air pollution control regulations. Specifically, the various notification, testing, monitoring, and record keeping provisions of 40 CFR Part 60, Subpart A are applicable to the facility.
- l) In accordance with Approval MBR-98-ECP-005, Approval MBR-96-IND-027, and Approval MBR-82-INC-004 should any nuisance condition(s) occur as a result of the operation of this facility, then appropriate steps shall immediately be taken by the facility to abate said nuisance condition(s).
- m) In accordance with Approval MBR-98-ECP-005 and 310 CMR 7.08(2), following performance tests for Dioxin\Furan or Mercury emissions, the facility shall operate with carbon mass feed rate that equals or exceeds the average that was determined during the performance test. Compliance with this minimum feed rate will be based on carbon mass feed rate 8-hour block averages, in pounds per hour (lbs/hr).
- n) Per data as supplied through the Permittee's Operating Permit Application (MBR-95-OPP-012, Transmittal No. 96402), EU1 and EU2 shall continue to emit products of combustion through two (2) separate flues

(Flue 1 and 2, respectively) contained in an existing stack, each flue having the following parameters:

Flue 1

Flue Height	230 feet
Flue Exit Diameter	7 feet
Flue Material	Steel

Flue 2

Flue Height	230 feet
Flue Exit Diameter	7 feet
Flue Material	Steel

- o) The Permittee is subject to, and has stated in their Operating Permit Application (MBR-95-OPP-012, Transmittal No. 96402), that they are in compliance with the requirements of 40 CFR Part 82: Protection of Stratospheric Ozone. These requirements are applicable to this facility and EPA enforces these requirements.

## 6. ALTERNATIVE OPERATING SCENARIOS

The Permittee did not request alternative operating scenarios in its Operating Permit Application.

## 7. EMISSIONS TRADING

- (a) Intra-facility emissions trading

The Permittee did not request intra-facility emissions trading in its Operating Permit Application.

Pursuant to 310 CMR 7.00: Appendix C(7)(b), emissions trades, provided for in this Permit, may be implemented provided the Permittee notifies The United States Environmental Protection Agency (EPA) and MassDEP at least fifteen (15) days in advance of the proposed changes and the Permittee provides the information required in 310 CMR 7.00: Appendix C(7)(b)3.

Any intra-facility change that does not qualify pursuant to 310 CMR 7.00: Appendix C(7)(b)2. is required to be submitted to MassDEP pursuant to 310 CMR 7.00: Appendix B.

- (b) Inter-facility emissions trading

The Permittee did not request inter-facility emissions trading in its Operating Permit Application.

All increases in emissions due to emissions trading, must be authorized under the applicable requirements of 310 CMR 7.00: Appendix B (the "Emissions Trading Program") and 42 U.S.C. §7401 et seq. (the "Act"), and provided for in this Permit.

## 8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5. In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

## GENERAL CONDITIONS FOR OPERATING PERMIT

### 9. FEES

The Permittee has paid the Permit Application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

### 10. COMPLIANCE CERTIFICATION

All documents submitted to MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

MassDEP has made available to the Permittee via MassDEP's web site, <http://www.mass.gov/dep/air/approvals/agforms.htm#op>, an "Operating Permit Reporting Kit". The "Operating Permit Reporting Kit" contains instructions, and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification.

#### **a. Annual Compliance Report and Certification**

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 to MassDEP and to the Regional Administrator, United States Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the Permit that are the basis of the certification;
- ii. the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- iv. any additional information required by MassDEP to determine the compliance status of the source.

#### **b. Semi-Annual Monitoring Summary Report and Certification**

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the Permit that are the basis of the certification;
- ii. the current compliance status during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test

- methods;
- iv. whether there were any deviations during the reporting period;
  - v. if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
  - vi. whether deviations in the reporting period were previously reported;
  - vii. if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
  - viii. if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
  - ix. any additional information required by MassDEP to determine the compliance status of the source.

## **11. NONCOMPLIANCE**

Any noncompliance with a Permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit Renewal Application by MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

## **12. PERMIT SHIELD**

(a) This facility has a Permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7 for the emission units as described in the Permittee's Application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier Approval or Permit, the terms and conditions of this Permit control.

(b) MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Part D., Table 7.

(c) Nothing in this Permit shall alter or affect the following:

- i. the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
- ii. the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
- iii. the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Clean Air Act.

## **13. ENFORCEMENT**

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.02(8)(i), 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Clean Air Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A.

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by MassDEP, EPA, and citizens as defined under the Clean Air Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

#### **14. PERMIT TERM**

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date five (5) years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete Renewal Application is submitted at least 6 months before the expiration date.

#### **15. PERMIT RENEWAL**

Upon MassDEP's receipt of a complete and timely Application for renewal, this facility may continue to operate subject to final action by MassDEP on the Renewal Application.

In the event MassDEP has not taken final action on the Operating Permit Renewal Application prior to this Permit's expiration date, this Permit shall remain in effect until MassDEP takes final action on the Renewal Application, provided that a timely and complete Renewal Application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

#### **16. REOPENING FOR CAUSE**

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by MassDEP and/or EPA. The responsible official of the facility may request that MassDEP terminate the facility's Operating Permit for cause. MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

#### **17. DUTY TO PROVIDE INFORMATION**

Upon MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to MassDEP copies of records that the Permittee is required to retain by this Permit.

#### **18. DUTY TO SUPPLEMENT**

The Permittee, upon becoming aware that any relevant facts were omitted or that incorrect information was submitted in the Permit Application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a



complete Renewal Application was submitted but prior to release of a Draft Permit.

The Permittee shall promptly, on discovery, report to MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to MassDEP.

## **19. TRANSFER OF OWNERSHIP OR OPERATION**

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an Administrative Permit Amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to MassDEP.

## **20. PROPERTY RIGHTS**

This Permit does not convey any property rights of any sort, or any exclusive privilege.

## **21. INSPECTION AND ENTRY**

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of MassDEP and EPA to perform the following, as per 310 CMR 7.00: Appendix C(3)(g)12.:

(a) enter upon the Permittee's premises where an Operating Permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;

(b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

(c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

(d) sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements.

## **22. PERMIT AVAILABILITY**

The Permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Permit, including any amendments or attachments thereto, upon request by MassDEP or EPA.

## **23. SEVERABILITY CLAUSE**

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

## 24. EMERGENCY CONDITIONS

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based<sup>1</sup> emission limitations specified in this Permit as a result of an emergency<sup>2</sup>. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- (b) the permitted facility was at the time being properly operated;
- (c) during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- (d) the Permittee submitted notice of the emergency to MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

## 25. PERMIT DEVIATION

Deviations are instances where any Permit condition is violated and not reported as an emergency pursuant to Section 24 of this Permit. Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supercede the following deviation reporting requirements, if applicable.

The Permittee shall report to MassDEP's Regional Bureau of Waste Prevention the following deviations from Permit requirements, by telephone or fax, within three (3) days of discovery of such deviation:

- Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- Exceedances of parameter limits established by your Operating Permit or other Approvals, where the parameter limit is identified by the Permit or Approval as surrogate for an emission limit.

---

<sup>1</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

<sup>2</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

- Exceedances of Permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other Approvals.
- Failure to perform QA/QC measures as required by your Operating Permit or other Approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the Massachusetts Department of Environmental Protection Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available via MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>. This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone or fax within three (3) days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the Regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations that do not require three (3) day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

## **26. OPERATIONAL FLEXIBILITY**

The Permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and MassDEP written notice fifteen (15) days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The Permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

## **27. MODIFICATIONS**

(a) Administrative Amendments - The Permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).

(b) Minor Modifications - The Permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

(c) Significant Modifications - The Permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).

(d) No Permit revision shall be required, under any approved economic incentives program, marketable Permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Clean Air Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

## **APPEAL CONDITIONS FOR OPERATING PERMIT**

This Permit is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to MassDEP's final action on Operating Permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the Application shield shall remain in effect, and the facility shall not be in violation of the Clean Air Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts  
Department of Environmental Protection (MassDEP)  
P.O. Box 4062  
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.