



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

**BUREAU OF AIR MANAGEMENT
TITLE V OPERATING PERMIT**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA) and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

| | |
|--|--------------------------|
| Title V Permit Number | 075-0245-TV |
| Client/ Sequence /Town/Premises Numbers | 5497/002/075/0158 |
| Date Issued | January 17, 2013 |
| Expiration Date | January 17, 2018 |

Corporation:

Connecticut Resources Recovery Authority

Premises Location:

*Mid-Connecticut Resources Recovery Facility
Reserve Road, Gate 20
Hartford, Connecticut 06114*

Name of Responsible Official and Title:

Peter W. Egan, Director of Operations & Environmental Affairs

All the following attached pages, 2 through 45, are hereby incorporated by reference into this Title V Operating Permit.

/s/ Anne Gobin for
Daniel C. Esty
Commissioner

January 17, 2013
Date

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Title V Operating Permit

All conditions in Sections III, IV, and VI of this Title V permit are enforceable by both the Administrator and the commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this Title V permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, and VI of this Title V permit in accordance with the Clean Air Act, as amended.

LIST OF ABBREVIATIONS/ACRONYMS

| <i>Abbreviation/Acronym</i> | <i>Description</i> |
|--------------------------------|---|
| acfm | Actual cubic feet per minute |
| BTU | British Thermal Unit |
| Cd | Cadmium |
| CEM | Continuous Emission Monitor |
| CFR | Code of Federal Regulations |
| CGS | Connecticut General Statutes |
| CO | Carbon Monoxide |
| CO ₂ | Carbon Dioxide |
| CRRA | Connecticut Resources Recovery Authority |
| °C | Degrees Celsius |
| °F | Degrees Fahrenheit |
| DEEP | Department of Energy and Environmental Protection |
| dscm | Dry standard cubic meters |
| EPA | Environmental Protection Agency |
| EU | Emissions Unit |
| ft | Feet |
| gal | Gallon |
| GEU | Grouped Emissions Units |
| H ₂ O | Water |
| H ₂ SO ₄ | Sulfuric Acid |
| HAP | Hazardous Air Pollutant |
| HCl | Hydrogen Chloride |
| Hg | Mercury |
| HHV | Higher Heating Value |
| hr | Hour |
| in | Inch |
| lb | Pound |
| m ³ | Cubic meters |
| MASC | Maximum Allowable Stack Concentration |
| mg | Milligram |
| min | Minute |
| MMBTU | Million British Thermal Units |
| MSW | Municipal Solid Waste |
| MWC | Municipal Waste Combustor |
| ng | Nanograms |
| NO _x | Nitrogen Oxides |
| NSR | New Source Review |
| O ₂ | Oxygen |
| O&M | Operations and Maintenance |
| Pb | Lead |
| PM | Particulate Matter |
| ppmvd | Parts per million, volumetric basis dry |
| psig | Pounds per square inch, gauge |
| RCSA | Regulations of Connecticut State Agencies |
| RDF | Refuse Derived Fuel |
| SDA | Spray Dryer Absorber |

LIST OF ABBREVIATIONS/ACRONYMS, continued

| <i>Abbreviation/Acronym</i> | <i>Description</i> |
|-----------------------------|---|
| SIC | Standard Industrial Classification Code |
| SNCR | Selective Non-Catalytic Reduction |
| SO ₂ | Sulfur Dioxide |
| SOS | Standard Operating Scenario |
| TPH | Tons Per Hour |
| TPM | Tons Per Month |
| TPY | Tons Per Year |
| TV | Title V Operating Permit |
| VOC | Volatile Organic Compound |

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Resource Recovery Facility
Primary SIC: 4953

Facility Mailing Address: Connecticut Resources Recovery Authority
100 Constitution Plaza, 6th Floor
Hartford, Connecticut 06103-1702

Telephone Number: (860) 757-7700

B. PREMISES DESCRIPTION

The Connecticut Resources Recovery Authority (CRRA) owns the Mid-Connecticut Resource Recovery Facility in Hartford, Connecticut. The facility is a major source for PM, NO_x, CO and HAPs and is located in a serious ozone non-attainment area defined in RCSA Section 22a-174-1(103). Refuse Derived Fuel (RDF) and coal is combusted to produce steam, which in turn is used to produce electricity.

Municipal Waste Combustors:

Three CE Power Systems VU-40 waterwall municipal waste combustors, with spreader stoker and traveling grates, (EU-1, 2 & 3) combust RDF and coal to produce steam, which is in turn used to produce electricity. The auxiliary burner system is natural gas fired. Each municipal waste combustor (MWC) is equipped with a spray dryer absorber (SDA) for acid gas control, a fabric filter for particulate matter control, and a selective non-catalytic reduction (SNCR) system for nitrogen oxide control. Each municipal waste combustor is also equipped with continuous emission monitors (CEM) to monitor opacity, SO₂, NO_x and CO. Permits to construct 075-0044, 075-0045 and 075-0046 were issued on April 18, 1985, permits to operate were issued August 27, 1993. These 3 permits were modified on April 27, 2007 to add requirements for the addition of the SNCR system as well as to incorporate the rules of RCSA §22a-174-38.

Ash Handling System:

The ash handling system (EU-4) takes the bottom ash from the municipal waste combustors and combines it with water and fly ash, lime and spent lime from the fabric filters. The combined ash is then discharged to an enclosed structure, where it remains until being loaded into truck for disposal. This unit does not require a registration or permit.

Dolomitic Lime Silo:

A silo (EU-5) stores the dolomitic lime used in the ash amendment system. It is equipped with a fabric filter for particulate matter control during deliveries. This unit does not require a registration or permit. The applicable requirements for this emission unit are listed in Section III.C – Premises-Wide Requirements of this Title V Permit.

Pebble Lime Silo:

A silo (EU-6) stores the pebble lime used in the spray dryer absorbers. It is equipped with a fabric filter for particulate matter control. This unit does not require a registration or permit. The applicable requirements for this emission unit are listed in Section III.C – Premises-Wide Requirements of this Title V Permit.

Section I: Premises Information/Description

Coal Processing System:

The coal processing system (GEU-1) is as follows. Coal is delivered to the facility by barge or truck as needed. Coal delivered by barge is lifted by crane and dumped in the coal hopper (EU-8) and onto Coal Conveyor 1 (EU-9), which conveys it to the coal pile (EU-7). Coal delivered by truck is dumped directly onto the coal pile (EU-7). A bulldozer moves the coal around the pile and onto the conveyors (EU-10, 11 and 12), which transport the coal to the municipal waste combustors. These units do not require a registration or permit. The applicable requirements for this grouped emission unit are listed in Section III.C – Premises-Wide Requirements of this Title V Permit.

Waste Processing Facility:

Municipal solid waste (MSW) is received at the Waste Processing Facility's (GEU-2) tipping floor, where it is processed by 2 RDF processing lines to remove ferrous material, large bulky waste, sand/dirt and glass and to produce a uniform size material, approximately 3 to 4 inch nominal size. Each processing line consists of a primary and secondary shredder (EU-13 to 16). RDF is stored on the RDF floor. RDF is loaded onto the RDF Conveyance system as needed. These units do not require a registration or permit. The applicable requirements for this grouped emission unit are listed in Section III.C – Premises-Wide Requirements of this Title V Permit.

RDF Conveyance System:

The RDF conveyance system (GEU-3) consists of 10 conveyors (EU-17 to 26), which transport RDF from the processed waste floor to the municipal waste combustors. All conveyors are fully enclosed. These units do not require a registration or permit. The applicable requirements for this grouped emission unit are listed in Section III.C – Premises-Wide Requirements of this Title V Permit.

Natural Gas Fired Heaters and Boilers:

Six small natural gas fired heaters and boilers (GEU-4) are operated at the Waste Processing Facility. GEU-4 is comprised of 2 Aerovent 5 MMBTU/hr Make-up Air Heaters (EU-27 and 28), 2 Weil Mclain 2.1 MMBTU/hr boilers (EU-29 and 30), an Aerovent 0.6 MMBTU/hr Make-up Air Heater (EU-30), and a Rezner 0.3 MMBTU/hr Make-up Air Heater (EU-32). These units do not require a registration or permit. The applicable requirements for this grouped emission unit are listed in Section III.C – Premises-Wide Requirements of this Title V Permit.

Section II: Emissions Units Information

A. EMISSIONS UNITS IDENTIFICATION:

Emissions units are set forth in Table II.A.1. It is not intended to incorporate by reference these NSR Permits, Orders, or Registrations into this Title V permit.

| TABLE II.A.1: EMISSIONS UNITS DESCRIPTION | | | |
|--|--|--|---|
| Emissions Unit/ Grouped Emission Unit | Emissions Unit Description | Control Unit Description | Permit, Order, Registration, or Regulation Number |
| EU-1 EU-2 EU-3 | 326 MMBTU/hr CE Power Systems VU-40 Municipal Waste Combustor No. 11 (Unit Load – 231,000 lb/hr) 326 MMBTU/hr CE Power Systems VU-40 Municipal Waste Combustor No. 12 (Unit Load – 231,000 lb/hr) 326 MMBTU/hr CE Power Systems VU-40 Municipal Waste Combustor No. 13 (Unit Load – 231,000 lb/hr) | Each MWC has a Spray Dryer Absorber (SDA), Fabric Filter and Selective Noncatalytic Reduction (SNCR) system. | NSR Permit No. 075-0044 NSR Permit No. 075-0045 NSR Permit No. 075-0046 |
| EU-4 | Ash Handling System | None | None |
| <i>All applicable requirements for the following units are listed in the premises-wide general requirements portion of this permit:</i> | | | |
| EU-5 | 85 ton Dolomitic Lime Storage Silo | Fabric Filter | None |
| EU-6 | 160 ton Pebble Lime Storage Silo | Fabric Filter | None |
| GEU-1 | Coal Processing System: Coal Pile (EU-7) Coal Hopper (EU-8) Coal Conveyor 1 (EU-9) Coal Conveyor 3 (EU-10) Coal Conveyor 3A, 3B (EU-11) Coal Conveyor 4 (EU-12) | None None Enclosed Enclosed Enclosed Enclosed | None |
| GEU-2 | Waste Processing Facility: Primary Shredder 1 (EU-13) Secondary Shredder 1 (EU-14) Primary Shredder 2 (EU-15) Secondary Shredder 2 (EU-16) | Fabric Filter Cyclone and Fabric Filter Fabric Filter Cyclone and Fabric Filter | None |
| GEU-3 | RDF Conveyance System: 10 RDF Conveyors (EU-17 to 26) | Enclosed | None |
| GEU-4 | Natural Gas Fired Heaters and Boilers: 2 Aerovent 5 MMBTU/hr Make-up Air Heater (EU-27, 28) 2 Weil Mclain 2.1 MMBTU/hr Boilers (EU-29, 30) Aerovent 0.6 MMBTU/hr Make-up Air Heater (EU-31) Rezner 0.3 MMBTU/hr Make-up Air Heater (EU-32) | None | None |

Section II: Emissions Units Information

B. OPERATING SCENARIO IDENTIFICATION

The Permittee shall be allowed to operate under the following Standard Operating Scenario (SOS) without notifying the commissioner, provided that such operations are explicitly provided for and described in the Table II.B below. There are no Alternate Operating Scenarios for the premises.

| TABLE II.B: OPERATING SCENARIO IDENTIFICATION | |
|--|---|
| Emissions Units Associated with the Scenario | Description of Scenario |
| EU-1, 2, & 3 | The standard operation of the 3 municipal waste combustors is the combustion of RDF and coal to produce steam, which in turn is used to generate electricity. The auxiliary burner system is natural gas fired. |
| EU-4 | The standard operation of the ash handling system is to remove the ash from the combustor grates and load the ash onto trucks for removal from the facility. |
| EU-5 | The standard operation of the lime silo is to store dolomitic lime used in the ash conditioning system. |
| EU-6 | The standard operation of the lime silo is to store pebble lime used in the spray dryer absorbers |
| GEU-1 (EU-7 – EU-12) | The standard operation of the coal processing system is to transport coal from the barge to the municipal waste combustors. |
| GEU-2 (EU-13 – EU-16) | The standard operation of the Waste Processing Facility is to reduce the MSW to a uniform size and to remove ferrous material, large bulky waste, sand/dirt, and glass. |
| GEU-3 (EU-17 – EU-26) | The standard operation of the RDF conveyance system is to transport RDF from the processed waste floor to the municipal waste combustors. |
| GEU-4 (EU-27 – EU-32) | The standard operation of the natural gas-fired heaters and boilers is to provide make-up air and heat for the Waste Processing Facility. |

Section III: Applicable Requirements and Compliance Demonstration

The following tables contain summaries of applicable regulations and compliance demonstration for each identified Emissions Unit and Operating Scenario, regulated by this permit.

A. EMISSIONS UNITS 1, 2, & 3 (EU-1, EU-2, & EU 3) – CE POWER SYSTEMS VU-40 MUNICIPAL WASTE COMBUSTOR NOS. 11, 12, & 13

1. Allowable Fuels/Materials & Charging Rate

a. Limitation or Restriction

- i. The Permittee shall allow only the following fuels to be combusted in each Municipal Waste Combustor (MWC) [NSR Permit Nos. 075-0044, -0045, and -0046, Part I.A.1.a.]:
 - (A) Refuse Derived Fuel (RDF). RDF shall consist only of Municipal Solid Waste (MSW) as defined and restricted under CGS 22a-207 et seq. and any applicable Bureau of Materials Management and Compliance Assurance permit. RDF shall not consist, in part, or in whole, of any of the following: commercial hazardous waste, industrial hazardous waste, biomedical waste, “beryllium containing waste” as defined by 40 CFR 61 Subpart C.
 - (B) Bituminous Coal
 - (C) Natural Gas
 - (D) Special Waste upon prior authorization by the commissioner.
- ii. The Permittee shall combust no more than 739,855 tons of RDF per calendar year on a facility-wide basis. [NSR Permit Nos. 075-0044, -0045, and -0046, Part I.A.1.b.]
- iii. When RDF, bituminous coal and natural gas are combusted simultaneously in a MWC, at no time shall the coal or natural gas contribution to the total BTU input exceed 249.9 MMBTU/hr for that MWC. [NSR Permit Nos. 075-0044, -0045, and -0046 Part I.A.1.c.]

b. Monitoring Requirements

- i. The Permittee shall determine the calendar year quantity of RDF by summing the scale house weight data for the calendar year minus the estimated tipping floor inventory on the last day of the year, less the scale house weight data for separated pre- and post-combustion scrap metal, oversized MSW, bulky waste and rejected wastes. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.A.1.]
- ii. The Permittee shall use a non-resettable totalizing fuel meter to continuously monitor the weight of coal combusted in each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.A.2.]
- iii. The Permittee shall use a common non-resettable totalizing fuel meter to continuously monitor total natural gas combusted in the 3 MWCs. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.A.3.]
- iv. The Permittee shall determine the calendar year quantity of Special Waste for the facility by summing the truck scale house weight data. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.A.4.]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the maximum demonstrated unit load, measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin/furan emissions limit was achieved. [RCSA §22a-174-33(o)(2)]
- ii. The Permittee shall make and keep records summarizing the calendar year quantity of RDF and Special Waste Combusted for the facility. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.1.]

Section III: Applicable Requirements and Compliance Demonstration

- iii. The Permittee shall make and keep records of hourly amounts of coal and natural gas combusted for each MWC. The Permittee shall total these amounts to create records of fuel combusted for the calendar year. Calendar year natural gas usage for each MWC shall be allocated based on records of the calendar year operating hours for each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.2.]
- iv. The Permittee shall record total natural gas usage combusted in the 3 MWCs on an hourly basis. [NSR Permit Nos. 075-0044, -0045, and -0046 Part IV.A.3.]

d. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include the calendar year quantity of RDF and Special Waste combusted by the facility, the hourly amounts of coal and natural gas combusted by each MWC, and the calendar year amounts of coal and natural gas combusted by each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-38(1)(3)]
- ii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

2. Operating Hours

a. Limitation or Restriction

There is no operating limit for daily operating hours for the 3 MWCs. However, there are Record Keeping and Reporting requirements for each of the 3 MWCs.

b. Record Keeping Requirements

- i. The Permittee shall make and keep records of daily operating hours of each MWC. The Permittee shall total these records to create records of operating hours for the calendar year. Records of operating hours shall be made to distinguish periods of start-up and shutdown for each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.3.]
- ii. The Permittee shall make and keep records of the dates and time periods of start-up, shutdown, and malfunction. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.12.]

c. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include the calendar year operating hours for each MWC and the dates and time periods of start-up, shutdown, and malfunction for each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-38(1)(3)]
- ii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

3. Stack Parameters

a. Limitation or Restriction

The Permittee shall comply with the following stack parameters [NSR Permit Nos. 075-0044, -0045, -0046, Part I.C.]:

- i. Minimum Stack Height: 218 ft above grade
- ii. Typical Stack Exhaust Temperature: 150-210°F
- iii. Design Exhaust Gas Flow Rate: 70,000 acfm
- iv. Minimum Distance to Property Line: 500 ft

Section III: Applicable Requirements and Compliance Demonstration

b. Record Keeping Requirements

- i. The Permittee shall make and keep records indicating compliance with the parameters specified in Section III.A.3.a. of this Title V Permit. [RCSA §22a-174-33(o)(2)]

c. Reporting Requirements

- i. The Permittee shall maintain records on site for the lifetime of the equipment and shall make them available to the commissioner upon request. [RCSA §22a-174-33(o)(2)]

4. Unit Load

a. Limitation or Restriction

- i. In no event shall each MWC unit load (steam production) exceed 254,100 lb/hr, based on a 4-hour block average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part I.A.1.d.]
- ii. The Permittee shall not cause or allow each MWC to operate at a unit load greater than 110% of the maximum demonstrated unit load, based on a 4-hour block average, measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin/furan emissions limit was achieved. [RCSA §22a-174-38(g)(2)]
- iii. The Permittee may, notwithstanding Section III.A.4.ii. of this Title V Permit, allow unit load in excess of Section III.A.4.ii. of this Title V Permit. However, should the Permittee operate the unit at such excess load, the Permittee shall not again be allowed to operate at such excess load during that test period without the approval of the commissioner should the annual dioxin/furan emission performance test be postponed. [RCSA §22a-174-38(g)(3)]
- iv. The MWC unit load limit may be waived temporarily by the commissioner to allow evaluation of system performance, testing of new technology or control technologies or diagnostic testing, provided that any such temporary waiver is authorized through a permit or order issued prior to an evaluation of system performance, testing of new technology or control technologies or diagnostic testing. [RCSA §22a-174-38(g)(4)]

b. Monitoring Requirements

- i. The Permittee shall operate a steam flow meter to continuously monitor each MWC unit load (steam production). [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.B.]
- ii. The Permittee shall install, operate, calibrate and maintain continuous monitoring systems for measuring MWC unit load. Continuous monitoring systems for MWC unit load shall meet the requirements of 40 CFR 60.1810(a). [RCSA §22a-174-38(j)(1)(F)]
- iii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-38(j)(2)(A) & (C)-(F)]:
 - (A) Data available for MWC unit load CEMs shall not be less than 90% of the total operating hours in any one calendar quarter and shall not be less than 95% of the total operating hours in any one calendar year.
 - (B) Obtain valid 1-hour averages for 75% of the operating hours per day for 90% of the operating days per calendar quarter during which the unit combusts any MSW.
 - (C) At least 3 equally spaced data points per hour shall be used to calculate a one-hour average.
 - (D) Notify the commissioner according to RCSA §22a-174-38(l)(3)(A)(v) in the event of failure to obtain the minimum data required by RCSA §22a-174-38(j)(2)(A) and (B).
 - (E) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(A) and (B) are obtained.

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

- i. The Permittee shall continuously record each MWC unit load (steam production) using a one-hour average for MWC unit load. The Permittee shall use a 4-hour block averaging time. [RCSA §22a-174-38(k)(3) & (4) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.B.]
- ii. The Permittee shall make and keep records of the maximum demonstrated unit load, based on a 4-hour block average, measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin/furan emissions limit was achieved. [RCSA §22a-174-38(k)(10) and §22a-174-33(o)(2)]
- iii. The calendar dates when any MWC unit load recorded under RCSA §22a-174-38(k)(3) or (4) are above the applicable limit shall be identified. The reasons for such exceedances, a description of the corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded. [RCSA §22a-174-38(k)(5)]
- iv. The calendar dates for which the minimum number of hours of any data required by RCSA §22a-174-38 have not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data. [RCSA §22a-174-38(k)(6)]
- v. When a MWC unit load has been excluded from the calculation of average MWC unit load, the owner or operator shall identify such exclusion as well as the reason(s) for excluding the data. [RCSA §22a-174-38(k)(7)]
- vi. The Permittee shall maintain records of the information specified in Sections III.A.4.c.i.-v. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis using a one-hour average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include the information as set forth in RCSA §22a-174-38(l)(3). [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3.]
- iv. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

5. Inlet Gas Temperature of Fabric Filter

a. Limitation or Restriction

- i. The Permittee shall not cause or allow such unit to operate at a temperature, measured at each particulate control device inlet more than 17°C, based on a 4-hour block average, above the maximum demonstrated fabric filter inlet temperature measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin/furan emissions limit was achieved. [RCSA §22a-174-38(g)(1)]

Section III: Applicable Requirements and Compliance Demonstration

- ii. The Permittee may, notwithstanding RCSA §22a-174-38(g)(1) and (2), during the annual dioxin/furan emissions performance test and for 2 weeks prior to such test, allow temperatures in excess of that specified in RCSA §22a-174-38(g)(1). However, should the Permittee operate the unit at such excess temperatures, the owner or operator shall not again be allowed to operate at such excess temperatures during that test period without the approval of the commissioner should the annual dioxin/furan emission performance test be postponed. [RCSA §22a-174-38(g)(3)]

b. Monitoring Requirements

- i. The Permittee shall continuously monitor the fabric filter inlet temperature. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.C.]
- ii. The Permittee shall use redundant thermocouples for measuring the inlet gas temperature of the fabric filter. Defective thermocouples shall be replaced as soon as practicable. The fabric filter thermocouple signal transmitter shall be calibrated annually. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.H.]
- iii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-38(j)(2)(A) & (C)-(F)]:
 - (A) Data available for gaseous and process CEMs shall not be less than 90% of the total operating hours in any one calendar quarter and shall not be less than 95% of the total operating hours in any one calendar year.
 - (B) Obtain valid 1-hour averages for 75% of the operating hours per day for 90% of the operating days per calendar quarter during which the unit combusts any municipal solid waste.
 - (C) At least 3 equally spaced data points per hour shall be used to calculate a one-hour average.
 - (D) Notify the commissioner according to RCSA §22a-174-38(l)(3)(A)(v) in the event of failure to obtain the minimum data required by RCSA §22a-174-38(j)(2)(A) and (B).
 - (E) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(A) and (B) are obtained.

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the maximum allowable inlet temperature of the fabric filter, based on the requirements of Section III.A.5.a.i. of this Title V Permit. [RCSA §22a-174-38(g)(2) and §22a-174-33(o)(2)]
- ii. The Permittee shall continuously record the fabric filter inlet temperature. The Permittee shall record one-hour and 4-hour block averaging time. [RCSA §22a-174-38(k)(3) & (4) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.C.]
- iii. The calendar dates when the fabric filter inlet temperatures are above the applicable limit shall be identified. The reasons for such exceedances, a description of the corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded. [RCSA §22a-174-38(k)(5)]
- iv. The calendar dates for which the minimum number of hours of fabric filter inlet temperature data has not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data. [RCSA §22a-174-38(k)(6)]
- v. When a fabric filter inlet temperature has been excluded from the calculation of average fabric filter inlet temperature, the owner or operator shall identify such exclusion as well as the reason(s) for excluding the data. [RCSA §22a-174-38(k)(7)]

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- vi. The Permittee shall maintain records of the information specified in Sections III.A.5.c.i-v. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis within 30 days following the end of each calendar quarter using a one-hour average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include a list of the highest fabric filter inlet temperature recorded based on 4-hour block averages, the number of days that the minimum number of hours of data for fabric filter inlet temperature were not obtained, and the total number of hours that data for fabric filter inlet temperature were excluded from the calculation of average fabric filter inlet temperature. [RCSA §22a-174-38(1)(3) and NSR Permit Nos. 075-0044, -0045, and -0046 Part IV.C.3.]
- iv. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

6. Particulate Matter

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of PM in excess of 25 mg/dscm of exhaust gas corrected to 7% O₂. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(1) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.A.]
- ii. Each MWC shall not emit greater than 51.3 tons of PM per calendar year. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.A.2.]

b. Monitoring Requirements

- i. Compliance with the 25 mg/dscm @ 7% O₂ emission limit shall be determined based on an annual performance test. Such test shall be conducted no less than 9 calendar months and no more than 15 calendar months following the previous performance test. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.A.1. and RCSA §22a-174-38(i)(2)]
- ii. Testing for PM levels shall be conducted in accordance with the following procedures [RCSA §22a-174-38(i)(4)(A)]:
 - (A) 40 CFR 60, Appendix A, Reference Method 1 shall be used to select the sampling site and number of traverse points for particulate matter testing
 - (B) 40 CFR 60, Appendix A, Reference Method 3 shall be used for flue gas analysis for PM testing
 - (C) 40 CFR 60, Appendix A, Reference Method 5 or 29 shall be used for determining compliance with the particulate matter emission limit. For each Method 5 or Method 29 test run: the minimum sample volume shall be 1.7 m³; the probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than 160 +/- 14°C; and an O₂ or CO₂ measurement shall be obtained simultaneously. For each Method 29 test run, the minimum sample time shall be 2 hours

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(D) The compliance determination for particulate matter shall be based on an arithmetic average determined using all data generated in 3 test runs as required by RCSA §22a-174-38

c. Record Keeping Requirements

- i. The Permittee shall calculate and record calendar year emissions for PM in units of TPY. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of each calendar year. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.5.]
- ii. The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits for particulate matter shall be recorded. [RCSA §22a-174-38(k)(10)]
- iii. The Permittee shall maintain records of the information specified Section III.A.6.c.ii. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each calendar year in which the data was collected. Each annual report shall include the calendar year emissions for PM in units of TPY for each MWC and a list of the PM emission levels achieved during all initial and annual performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-38(l)(3)(A)(i)]
- ii. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any PM emission levels exceed the emission limitations or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]
- iii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

7. Opacity

a. Limitation or Restriction

- i. The Permittee shall not allow the MWCs to exceed an opacity emission limit of 10%, using a 6-minute arithmetic average. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(1) & (5) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.]

b. Monitoring Requirements

- i. Continuous compliance with the emission limits for opacity shall be determined based on CEM system data. The Permittee shall install, operate and calibrate such CEM system in a manner acceptable to the commissioner and certify to the commissioner, in writing, that the equipment specifications for the CEM system have been and are being met. Opacity monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 1; RCSA §22a-174-4; and 40 CFR 60.13. [RCSA §22a-174-38(j)(1)(A)]
- ii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-38(j)(2)(B) & (F)]:
 - (A) Data available for opacity CEMs shall not be less than 95% of the total operating hours in any one calendar quarter.

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(B) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(B) are obtained.

iii. Testing opacity levels shall be conducted in accordance with the procedures described in 40 CFR 60, Appendix A, Reference Method 9, except as provided under 40 CFR 60.11(e). [RCSA §22a-174-38(i)(4)(A)(iv)]

c. Record Keeping Requirements

- i. The Permittee shall operate a CEM system to continuously record opacity using a 6-minute arithmetic average. [RCSA §22a-174-38(k)(3)(A) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.A.]
- ii. The calendar dates when any opacity levels recorded are above the applicable limit shall be identified. The reasons for such exceedances, a description of the corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded. [RCSA §22a-174-38(k)(5)]
- iii. The calendar dates for which the minimum number of hours of opacity data have not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data. [RCSA §22a-174-38(k)(6)]
- iv. The results of daily calibrations and quarterly accuracy determinations for opacity CEM systems shall be recorded. [RCSA §22a-174-38(k)(8)]
- v. The Permittee shall maintain records of the information specified in Sections III.A.7.c.i-iv., labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures, no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis using a 6-minute arithmetic average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include a list of the opacity emission levels achieved during all initial and annual performance tests and the highest 6-minute average opacity level measured. [RCSA §22a-174-38(l)(3)(A)(i) & (iii) and NSR Permit Nos. 075-0044, -0045, and -0046 Part IV.C.3.]
- iv. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any opacity emission levels exceed the emission limitations or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]
- v. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

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8. SO₂

a. Limitation or Restriction

- i. The Permittee shall not allow each MWC to exceed an SO₂ emission limit of 29 ppmvd @ 7% O₂, using a 24-hour geometric average, or achieve 75% reduction by weight or volume, whichever is less stringent. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.]
- ii. The SO₂ emission limit for each MWC when combusting only coal is 0.55 lb/MMBTU based on a 24-hour block average. The SO₂ emission limit for each MWC when combusting only RDF is 0.32 lb/MMBTU based on a 24-hour block average. When a mixture of coal and RDF is combusted, the SO₂ emission limit for each MWC shall be calculated as follows:
$$((0.55 * C) + (0.32 * R)) \text{ lb/MMBTU based on a 24-hour block average,}$$
where C is the fraction of BTU input from coal and R is the fraction of BTU input from RDF over the 24-hour period. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.C.2.]
- iii. Each MWC shall not emit greater than 457.0 tons of SO₂ over any 12 consecutive months. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.C.3.]

b. Monitoring Requirements

- i. Continuous compliance with the emission limits for SO₂ and SO₂ reduction efficiency shall be determined based on CEM system data. The Permittee shall install, operate and calibrate such CEM system in a manner acceptable to the commissioner and certify to the commissioner, in writing, that the equipment specifications for the CEM system have been and are being met. SO₂ monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 2; 40 CFR 60, Appendix F, Procedure 1; and 40 CFR 60.13. [RCSA §22a-174-38(j)(1)(C)]
- ii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-38(j)(2)(A) &(C)-(F)]:
 - (A) Data available for sulfur dioxide CEMs shall not be less than 90% of the total operating hours in any one calendar quarter and shall not be less than 95% of the total operating hours in any one calendar year.
 - (B) Obtain valid 1-hour averages for 75% of the operating hours per day for 90% of the operating days per calendar quarter during which the unit combusts any municipal solid waste.
 - (C) At least 3 equally spaced data points per hour shall be used to calculate a one-hour average.
 - (D) Notify the commissioner according to RCSA §22a-174-38(l)(3)(A)(v) in the event of failure to obtain the minimum data required by RCSA §22a-174-38(j)(2)(A).
 - (E) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(A) and (B) are obtained.
- iii. During a loss of boiler water level control or a loss of combustion air control malfunction period, a diluents cap of 14% for oxygen and 5% for carbon dioxide may be used in the emissions calculations for sulfur dioxide. [RCSA §22a-174-38(j)(3)]

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c. Record Keeping Requirements

- i. The Permittee shall calculate and record monthly and consecutive 12-month emissions for SO₂ for each MWC in units of TPM and TPY for the preceding month. The consecutive 12-month emissions shall be determined by adding the current month's emission to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of each month. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.4]
- ii. SO₂ emission concentrations, measured using a CEM system, shall be recorded as one-hour average SO₂ emission concentrations and one-hour average SO₂ reduction efficiency levels; and 24-hour daily geometric average SO₂ emission concentrations and 24-hour daily geometric average percent reductions in SO₂ emissions [RCSA §22a-174-38(k)(3) & (4)]
- iii. The calendar dates when any of the average SO₂ emission concentrations or percent reductions are above the applicable limit shall be identified. The reasons for such exceedances, a description of the corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded. [RCSA §22a-174-38(k)(5)]
- iv. The calendar dates for which the minimum number of hours of any SO₂ emissions concentrations or percent reductions have not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data. [RCSA §22a-174-38(k)(6)]
- v. When SO₂ emissions data has been excluded from the calculation of average SO₂ emission concentration, the Permittee shall identify such exclusion as well as the reason(s) for excluding the data. [RCSA §22a-174-38(k)(7)]
- vi. The results of daily calibrations and quarterly accuracy determinations for SO₂ CEM systems shall be recorded. [RCSA §22a-174-38(k)(8)]
- vii. The Permittee shall maintain records of the information specified in Sections III.A.8.c.ii.-vi. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures, no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis using a one-hour average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include the monthly and consecutive 12-month emissions for SO₂ in units of TPM and TPY for each MWC, a list of the highest emission levels recorded for SO₂ based on the data recorded for 24-hour daily geometric averages, the number of days that the minimum number of hours of data required for SO₂ emissions were not obtained, and the total number of hours for which the SO₂ emissions were excluded from the calculation of average emissions. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-38(1)(3)]
- iv. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

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9. NO_x

a. Limitation or Restriction

- i. The Permittee shall not allow each MWC to exceed a NO_x emission limit of 146 ppmvd @ 7% O₂, using a 24-hour daily average. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(8) & (9) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.]
- ii. Each MWC shall not emit greater than 420.0 tons of nitrogen oxides over any 12 consecutive months. [RCSA §22a-174-22(e)(2)(4) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.D.2.]

b. Monitoring Requirements

- i. Continuous compliance with the emission limits shall be determined based on CEM system data. The Permittee shall install, operate and calibrate such CEM system in a manner acceptable to the commissioner and certify to the commissioner, in writing, that the equipment specifications for the CEM system have been and are being met. NO_x monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 2; 40 CFR 60, Appendix F, Procedure 1; and 40 CFR 60.13. [RCSA §22a-174-38(j)(1)(D)]
- ii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-38(j)(2)(A) & (C)-(F)]:
 - (A) Data available for NO_x CEMs shall not be less than 90% of the total operating hours in any one calendar quarter and shall not be less than 95% of the total operating hours in any one calendar year.
 - (B) Obtain valid 1-hour averages for 75% of the operating hours per day for 90% of the operating days per calendar quarter during which the unit combusts any municipal solid waste.
 - (C) At least 3 equally spaced data points per hour shall be used to calculate a one-hour average.
 - (D) Notify the commissioner according to RCSA §22a-174-38(l)(3)(A)(v) in the event of failure to obtain the minimum data required by RCSA §22a-174-38(j)(2)(A) and (B).
 - (E) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(A) and (B) are obtained.
- iii. During a loss of boiler water level control or a loss of combustion air control malfunction period, a diluents cap of 14% for oxygen and 5% for carbon dioxide may be used in the emissions calculations for sulfur dioxide. [RCSA §22a-174-38(j)(3)]

c. Record Keeping Requirements

- i. The Permittee shall calculate and record monthly and consecutive 12-month emissions for NO_x for each MWC in units of TPM and TPY for the preceding month. The consecutive 12-month emissions shall be determined by adding the current month's emission to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of each month. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.4]
- ii. The Permittee shall operate a CEM system to continuously record NO_x emissions. NO_x emissions concentrations shall be recorded as one-hour averages and 24-hour daily averages. [RCSA §22a-174-38(k)(3)(D) & (4)(B) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.A.]
- iii. The calendar dates when any average NO_x concentrations are above the applicable limit shall be identified. The reasons for such exceedances, a description of the corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded. [RCSA §22a-174-38(k)(5)]

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- iv. The calendar dates for which the minimum number of hours of NO_x concentration data has not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data. [RCSA §22a-174-38(k)(6)]
- v. When NO_x emissions data has been excluded from the calculation of average NO_x emission concentration, the Permittee shall identify such exclusion as well as the reason(s) for excluding the data. [RCSA §22a-174-38(k)(7)]
- vi. The results of daily calibrations and quarterly accuracy determinations for NO_x CEM systems shall be recorded. [RCSA §22a-174-38(k)(8)]
- vii. The Permittee shall maintain records of the information specified in Sections III.A.9.c.ii.-vi. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures, no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis using a one-hour average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include the monthly and consecutive 12-month emissions for NO_x in units of TPM and TPY for each MWC, a list of the highest emission level recorded for NO_x based on the data recorded for the 24-hour daily average, the number of days that the minimum number of hours of data required for NO_x emissions were not obtained, and the total number of hours for which the NO_x emissions were excluded from the calculation of average emissions. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-38(1)(3)(A)(ii), (v), & (vi)]
- iv. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

10. CO

a. Limitation or Restriction

- i. The Permittee shall not allow each MWC to exceed a CO emission limit of 200 ppmvd @ 7% O₂, using a 24-hour daily average. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction. If a loss of boiler water level control or a loss of combustion air control is determined to be a malfunction, the duration of the malfunction period shall be limited to 15 hours per occurrence. Otherwise, the duration of each start-up, shutdown, or malfunction period shall be limited to 3 hours per occurrence. [RCSA §22a-174-38(c)(10), RCSA §22a-174-38(c)(11)(A), and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.E.1.]
- ii. Each MWC shall not emit greater than 389.0 tons of CO over any 12 consecutive months. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.E.2.]

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b. Monitoring Requirements

- i. Continuous compliance with the emission limits shall be determined based on CEM system data. The Permittee shall install, operate and calibrate such CEM system in a manner acceptable to the commissioner and certify to the commissioner, in writing, that the equipment specifications for the CEM system have been and are being met. CO monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 4 or 4A (as applicable); 40 CFR 60, Appendix F, Procedure 1 and 40 CFR 60.13. [RCSA §22a-174-38(j)(1)(E)(i) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.A.]
- ii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-38(j)(2)(A) and (C)-(F)]:
 - (A) Data available for CO shall not be less than 90% of the total operating hours in any one calendar quarter and shall not be less than 95% of the total operating hours in any one calendar year.
 - (B) Obtain valid 1-hour averages for 75% of the operating hours per day for 90% of the operating days per calendar quarter during which the unit combusts any municipal solid waste.
 - (C) At least 3 equally spaced data points per hour shall be used to calculate a one-hour average.
 - (D) Notify the commissioner according to RCSA §22a-174-38(l)(3)(A)(v) in the event of failure to obtain the minimum data required by RCSA §22a-174-38(j)(2)(A) and (B).
 - (E) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(A) and (B) are obtained.

c. Record Keeping Requirements

- i. The Permittee shall calculate and record monthly and consecutive 12-month emissions for CO for each MWC in units of TPM and TPY for the preceding month. The consecutive 12-month emissions shall be determined by adding the current month's emission to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of each month. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.4]
- ii. The Permittee shall operate a CEM system to continuously record CO emissions. CO emissions shall be recorded as one-hour average emissions concentrations and 24-hour daily average CO emissions concentrations. [RCSA §22a-174-38(k)(3)(E) & (4)(C) and NSR Permit Nos. 075-0044, -0045, and -0046, Part III.A.]
- iii. The calendar dates when any average CO emissions are above the applicable limit shall be identified. The reasons for such exceedances, a description of the corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded. [RCSA §22a-174-38(k)(5)]
- iv. The calendar dates for which the minimum number of hours of CO measurements have not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data. [RCSA §22a-174-38(k)(6)]
- v. When CO emissions have been excluded from the calculation of average emission concentrations or parameters, the Permittee shall identify such exclusion as well as the reason(s) for excluding the data. [RCSA §22a-174-38(k)(7)]
- vi. The results of daily calibrations and quarterly accuracy determinations for CO CEM systems shall be recorded. [RCSA §22a-174-38(k)(8)]

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vii. The Permittee shall maintain records of the information specified in Sections III.A.10.c.ii.-vi. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures, no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis using a one-hour average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include the monthly and consecutive 12-month emissions for CO in units of TPM and TPY for each MWC, a list of the highest emission level recorded for CO based on the data recorded for the 24-hour daily average, the number of days that the minimum number of hours of data required for CO emissions were not obtained, and the total number of hours for which the CO emissions were excluded from the calculation of average emissions. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-38(l)(3)(A)(ii), (v), & (iv)]
- iv. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

11. VOC/ Hydrocarbons

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of greater than 70 ppmvd of VOC (expressed as methane) corrected to 12% CO₂ from each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.F.1.]
- ii. Each MWC shall not emit greater than 130.0 tons of hydrocarbons per calendar year. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.F.2.]

b. Monitoring Requirements

- i. Pursuant to RCSA §§22a-174-5(e) and 22a-174-29(e), the commissioner may require the Permittee to conduct additional performance testing of any pollutant, possibly on an annual basis, based on CEM data, emission test results, and any other information that the commissioner deems appropriate. [NSR Permit Nos. 075-0044, -0045, and -0046 Part VII.D.]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of all required performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.6.]
- ii. The Permittee shall calculate and record calendar year emissions for VOC in units of TPY. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of each calendar year. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.5.]

d. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include the calendar year emissions for VOC in units of TPY for each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4.]

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- ii. The Permittee shall submit reports to the commissioner of all required performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.1.]
- iii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

12. Hydrogen Chloride

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of HCl in excess of 29 ppmvd corrected to 7% O₂, or achieve 95% reduction by weight or volume measured as required by RCSA §22a-174-38(c)(7), whichever is less stringent. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(1) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.G.]

b. Monitoring Requirements

- i. Compliance with this emission limit shall be determined based on an annual performance test. Such test shall be conducted no less than 9 calendar months and no more than 15 calendar months following the previous performance test for HCl. [RCSA §22a-174-38(c)(3) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.G.]

- ii. Testing for HCl levels shall be conducted in accordance with the following procedures [RCSA §22a-174-38(i)(4)(G)]:

(A) 40 CFR Part 60, Appendix A, Reference Method 26 or 26A, as applicable, shall be used to determine the HCl emission concentration. The minimum sampling time for Method 26 shall be one hour

(B) An O₂ or CO₂ measurement shall be obtained simultaneously with each Method 26 test run for HCl required by RCSA §22a-174-38

(C) The percent reduction in potential HCl emissions (% PHCl) shall be computed using the following equation:

$$(\% PHCl) = ((E_i - E_o) / E_i) \times 100,$$

where: %PHCl = percent reduction of the potential HCl emissions achieved;

E_i = potential HCl emission concentration measured at the control device inlet, corrected to 7% O₂ (dry basis); and

E_o = controlled HCl emission concentration measured at the control device outlet, corrected to 7% O₂ (dry basis)

(D) The compliance determination for HCl shall be based on an arithmetic average of emission concentrations or percent reductions determined using all data generated in 3 test runs as required by RCSA §22a-174-38.

- iii. If the Permittee complies with the percent reduction limitation, compliance shall be determined by measuring the concentration of HCl at the outlet of the air pollution control device that discharges directly to the stack, subtracting it from the concentration at the inlet of the air pollution control device that receives exhaust gases directly from the combustion chamber dividing the difference by the concentration of HCl at the inlet to the air pollution control device that receives exhaust gases directly from the combustion chamber and then multiplying that result by a factor of 100. [RCSA §22a-174-38(c)(7)]

c. Record Keeping Requirements

- i. The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits specified in RCSA §22a-174-38 for HCl shall be recorded. [RCSA §22a-174-38(k)(10)]

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- ii. The Permittee shall maintain records of the information specified in Section III.A.12.c.i. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any HCl emission levels exceed the emission limitations or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]
- ii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include a list of the HCl emission levels achieved during all initial and annual performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and RCSA §22a-174-38(l)(3)(A)(i)]

13. Cadmium

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of Cd in excess of 0.035 mg/dscm of exhaust gas corrected to 7% O₂. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(1) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.H.]

b. Monitoring Requirements

- i. Compliance with this emission limit shall be determined based on an annual performance test. Such test shall be conducted no less than 9 calendar months and no more than 15 calendar months following the previous performance test for Cd. [RCSA §22a-174-38(c)(3) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.I.1.]
- ii. Testing for Cd levels shall be conducted in accordance with the following procedures [RCSA §22a-174-38(i)(4)(B)]:
 - (A) 40 CFR Part 60, Appendix A, Reference Method 1 shall be used for determining the location and number of sampling points
 - (B) 40 CFR Part 60, Appendix A, Reference Method 3 shall be used for flue gas analysis
 - (C) 40 CFR Part 60, Appendix A, Reference Method 29 shall be used for determining compliance with the Cd emission limits
 - (D) An O₂ or CO₂ measurement shall be obtained simultaneously with each Method 29 test run for Cd required under RCSA §22a-174-38
 - (E) The minimum sample time shall be 2 hours per each Method 29 test run
 - (F) The compliance determinations for cadmium shall be based on an arithmetic average determined using all data generated in 3 test runs as required by RCSA §22a-174-38

c. Record Keeping Requirements

- i. The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits specified in RCSA §22a-174-38 for Cd shall be recorded. [RCSA §22a-174-38(k)(10)]
- ii. The Permittee shall maintain records of the information specified in Section III.A.13.c.i. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

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d. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include a list of the Cd emission levels achieved during all initial and annual performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and RCSA §22a-174-38(l)(3)(A)(i)]
- ii. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any Cd emission levels exceed the emission limitations or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]

14. Lead

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of Pb in excess of 0.400 mg/dscm of exhaust gas corrected to 7% O₂. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(1) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VII.1.]
- ii. Each MWC shall not emit greater than 0.48 tons of Pb per calendar year. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VII.2.]

b. Monitoring Requirements

- i. Compliance with this emission limit shall be determined based on an annual performance test. Such test shall be conducted no less than 9 calendar months and no more than 15 calendar months following the previous performance test for such pollutant. [RCSA §22a-174-38(c)(3) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.1.]
- ii. Testing for Pb levels shall be conducted in accordance with the following procedures [RCSA §22a-174-38(i)(4)(B)]:
 - (A) 40 CFR Part 60, Appendix A, Reference Method 1 shall be used for determining the location and number of sampling points
 - (B) 40 CFR Part 60, Appendix A, Reference Method 3 shall be used for flue gas analysis
 - (C) 40 CFR Part 60, Appendix A, Reference Method 29 shall be used for determining compliance with the Pb emission limits
 - (D) An O₂ or CO₂ measurement shall be obtained simultaneously with each Method 29 test run for Pb required under RCSA §22a-174-38
 - (E) The minimum sample time shall be 2 hours per each Method 29 test run
 - (F) The compliance determinations for lead shall be based on an arithmetic average determined using all data generated in 3 test runs as required by RCSA §22a-174-38

c. Record Keeping Requirements

- i. The Permittee shall calculate and record calendar year emissions for Pb in units of TPY. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of each calendar year. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.5.]
- ii. The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits specified in RCSA §22a-174-38 for lead shall be recorded. [RCSA §22a-174-38(k)(10)]
- iii. The Permittee shall maintain records of the information specified in Section III.A.14.c.ii. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

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d. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include a list of the Pb emission levels achieved during all initial and annual performance tests and the calendar year emissions for lead in units of TPY for each MWC. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-38(l)(3)(A)(i)]
- ii. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any Pb emission levels exceed the emission limitations or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]
- iii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

15. Mercury

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of Hg in excess of 0.028 mg/dscm of exhaust gas corrected to 7% O₂, or achieve 85% reduction by weight measured as required by RCSA §22a-174-38(c)(7), whichever is less stringent. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(1) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.J.]

b. Monitoring Requirements

- i. Compliance with this emission limit shall be determined based on an annual performance test. Such test shall be conducted no less than 9 calendar months and no more than 15 calendar months following the previous performance test for mercury. [RCSA §22a-174-38(c)(3) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI. J.]
- ii. Testing for Hg levels shall be conducted in accordance with the following procedures [RCSA §22a-174-38(i)(4)(C)]:
 - (A) 40 CFR Part 60, Appendix A, Reference Method 1 shall be used for determining the location and number of sampling points
 - (B) 40 CFR Part 60, Appendix A, Reference Method 3 shall be used for flue gas analysis
 - (C) 40 CFR Part 60, Appendix A, Reference Method 29 shall be used for determining compliance with the Hg emission limits. An O₂ or CO₂ measurement shall be obtained simultaneously with each Method 29 test run for Hg required under RCSA §22a-174-38
 - (D) The minimum sample time shall be 2 hours per each Method 29 test run
 - (E) The percent reduction in the potential Hg emissions (%PHg) is computed using the following equation:
$$(\%PHg) = ((Ei - Eo) / Ei) \times 100;$$
where: %PHg = percent reduction of the potential Hg emissions achieved;
Ei = potential Hg emission concentration measured at the control device inlet, corrected to 7% O₂ (dry basis); and
Eo = controlled mercury emission concentration measured at the Hg control device outlet, corrected to 7% O₂ (dry basis)
 - (F) The compliance determinations for Hg shall be based an arithmetic average of emission concentrations or percent reductions determined using all data generated in a minimum of at least 3 test runs as required by RCSA §22a-174-38.

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iii. If the Permittee complies with the percent reduction limitation, compliance shall be determined by measuring the concentration of Hg at the outlet of the air pollution control device that discharges directly to the stack, subtracting it from the concentration at the inlet of the air pollution control device that receives exhaust gases directly from the combustion chamber dividing the difference by the concentration of Hg at the inlet to the air pollution control device that receives exhaust gases directly from the combustion chamber and then multiplying that result by a factor of 100. [RCSA §22a-174-38(c)(7)]

c. Record Keeping Requirements

- i. The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits specified in RCSA §22a-174-38 for Hg shall be recorded. [RCSA §22a-174-38(k)(10)]
- ii. The Permittee shall maintain records of the information specified in Section III.A.15.c.i. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any Hg emission levels exceed the emission limitations or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]
- ii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include a list of the Hg emission levels achieved during all initial and annual performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and RCSA §22a-174-38(l)(3)(A)(i)]

16. Dioxin/Furan

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of dioxins and furans in excess of 30 ng/dscm of exhaust gas total mass corrected to 7% O₂. This emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [RCSA §22a-174-38(c)(1) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.K.1.]
- ii. The Permittee shall not cause or allow emission of greater than 5.04×10^{-7} lb of dioxin/furan toxic equivalents per hour. [RCSA §22a-174-1(33) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.K.2.]

b. Monitoring Requirements

- i. Compliance with this emission limit shall be determined based on an annual performance test, performed as set forth in RCSA §22a-174-38(i). Such test shall be conducted no less than 9 calendar months and no more than 15 calendar months following the previous performance test for dioxin/furan. [RCSA §22a-174-38(c)(3) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.K.1.]
- ii. Notwithstanding Section III.A.16.b.i. of this Title V permit, upon demonstration for 2 consecutive years that the dioxin/furan emission levels from each MWC are less than 15 ng/dscm total mass, the Permittee shall only be required to conduct performance testing for dioxin/furan on one unit at the facility. The Permittee shall rotate performance testing among units in a fixed sequence so that each unit is tested at the same frequency. One unit at the plant shall be tested at least once per calendar year and such test shall be conducted no less than 9 calendar months and no more than 15 calendar months following the previous performance test. If in any year following the year of election of such reduced testing, the dioxin/furan emission test results indicate a level equal to or greater than 15 ng/dscm total mass for any unit, then the Permittee shall resume testing of all units at the facility during the next annual performance test. The Permittee shall continue to test all units on an annual basis until the performance tests for all units indicate the dioxin/furan emission levels meet the requirements of RCSA §22a-174-38(i)(3), at which time the owner/operator may resume testing in accordance with RCSA §22a-174-38(i)(3). [RCSA §22a-174-38(i)(3)]

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- iii. Testing for dioxin/furan levels shall be conducted in accordance with the following procedures [RCSA §22a-174-38(i)(4)(H)]:
 - (A) 40 CFR Part 60, Appendix A, Reference Method 1 shall be used for determining the location and number of sampling points
 - (B) 40 CFR Part 60, Appendix A, Reference Method 3 shall be used for flue gas analysis
 - (C) 40 CFR Part 60, Appendix A, Reference Method 23 shall be used for determining the dioxin/furan emission concentration
 - (D) The minimum sample time shall be 4 hours per test run
 - (E) An O₂ or CO₂ measurement shall be obtained simultaneously with each Method 23 test run for dioxin/furan required by RCSA §22a-174-38
 - (F) The compliance determination for dioxin/furan levels shall be based on an arithmetic average determined using all data generated as required by RCSA §22a-174-38 in 3 test runs

c. Record Keeping Requirements

- i. The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits for dioxin/furan emissions shall be recorded. The maximum demonstrated MWC unit load and maximum demonstrated PM control device temperature (for each PM control device) shall be recorded for each performance test for dioxin/furan emissions. [RCSA §22a-174-38(k)(10)]
- ii. The Permittee shall maintain records of the information specified in Section III.A.16.c.i. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any dioxin/furan emission levels exceed the emission limitations or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]
- ii. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include a list of the dioxin/furan emission levels achieved during all initial and annual performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and RCSA §22a-174-38(l)(3)(A)(i)]

17. Sulfuric Acid

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of greater than 0.02 lb of H₂SO₄ per MMBTU of heat input. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.L.]

b. Monitoring Requirements

- i. Pursuant to RCSA §§22a-174-5(e) and 22a-174-29(e), the commissioner may require the Permittee to conduct additional performance testing of any pollutant, possibly on an annual basis, based on CEM data, emission test results, and any other information that the commissioner deems appropriate. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VII.D.]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of all required performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.6.]

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d. Reporting Requirements

- i. The Permittee shall submit reports to the commissioner of all required performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.1.]

18. Ammonia

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emission of ammonia in excess of 20 ppmvd corrected to 7% O₂. For EU-1, the emission limit shall apply at all times except during periods of start-up, shutdown, or malfunction as set forth in RCSA §22a-174-38(c)(11). [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.M.]

b. Monitoring Requirements

- i. The Permittee shall use 40 CFR Part 60, Appendix A, Reference Method 26A or other method approved by the commissioner to determine compliance with the ammonia emission limit in Emission Units 2 & 3. The compliance determination for ammonia shall be based on an arithmetic average determined using all data generated in 3 test runs. The minimum sample time shall be one hour per each test run. [NSR Permit Nos. 075-0045 and -0046, Part VI.M.]
- ii. Continuous compliance with the emission limit shall be determined based on CEM system data for Emission Unit 1 and shall be based on a 24-hour daily average. The Permittee shall install, operate and calibrate such CEM system in a manner acceptable to the commissioner and certify to the commissioner, in writing, that the equipment specifications for the CEM system have been and are being met. Ammonia CEM system performance specifications and quality assurance procedures are subject to review by the commissioner and shall not be implemented until approval has been received. [NSR Permit No. 075-0044, Part VI.M. and RCSA §22a-174-33(j)(1)(K)]
- iii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-33(j)(1)(K)]:
 - (A) Data available for gaseous and process CEMs shall not be less than 90% of the total operating hours in any one calendar quarter and shall not be less than 95% of the total operating hours in any one calendar year.
 - (B) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(A) and (B) are obtained.

c. Record Keeping Requirements

- i. The Permittee shall calculate and record calendar year emissions for ammonia in units of TPY for Emissions Units 2 & 3. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of each calendar year. [NSR Permit Nos. 075-0045 and -0046, Part IV.B.5.]
- ii. The Permittee shall operate a CEM system to continuously record ammonia emissions for Emissions Unit 1. Ammonia emissions concentrations shall be recorded as one-hour averages and 24-hour daily averages. [RCSA §22a-174-33(o)(2) and NSR Permit No. 075-0044, Part III.A.]
- iii. The calendar dates when any average ammonia concentrations are above the applicable limit shall be identified for Emissions Unit 1. The reasons for such exceedances, a description of the corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded. [RCSA §22a-174-33(o)(2)]
- iv. The calendar dates for which the minimum number of hours of ammonia concentration data has not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data for Emissions Unit 1. [RCSA

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§22a-174-33(o)(2)]

- v. When ammonia emissions data has been excluded from the calculation of average ammonia emission concentration for Emissions Unit 1, the Permittee shall identify such exclusion as well as the reason(s) for excluding the data. [RCSA §22a-174-33(o)(2)]
- vi. The results of daily calibrations and quarterly accuracy determinations for ammonia CEM systems shall be recorded. [RCSA §22a-174-33(o)(2)]
- vii. The Permittee shall maintain records of the information specified in Sections III.A.18.c.ii.-vi. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-33(o)(2)]

d. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data was collected. Each annual report shall include the calendar year emissions for ammonia in units of TPY for Emissions Unit 2 & 3. Each annual report shall also include the calendar year emissions for ammonia in units of TPY for Emissions Unit 1, a list of the highest emission level recorded for ammonia based on the data recorded for the 24-hour daily average, the number of days that the minimum number of hours of data required for ammonia emissions were not obtained, and the total number of hours for which the ammonia emissions were excluded from the calculation of average emissions. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3. and 4. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures, no later than 10 days after such deviation commenced. [NSR Permit No. 075-0044, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

19. Hazardous Air Pollutants

a. Limitation or Restriction

- i. The Permittee shall not cause or allow an exceedance of the Maximum Allowable Stack Concentration (MASC) for any HAP listed in RCSA §22a-174-29. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VI.N.]

b. Monitoring Requirements

- i. Pursuant to RCSA §§22a-174-5(e) and 22a-174-29(e), the commissioner may require the Permittee to conduct additional performance testing of any pollutant, possibly on an annual basis, based on CEM data, emission test results, and any other information that the commissioner deems appropriate. [NSR Permit Nos. 075-0044, -0045, and -0046, Part VII.D.]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of all required performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.6.]

d. Reporting Requirements

- i. The Permittee shall submit reports to the commissioner of all required performance tests. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.1.]

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20. Furnace Temperature

a. Limitation or Restriction

- i. Each MWC shall be capable of maintaining a minimum combustion gas temperature of 1500°F after secondary air injections for at least one second. [NSR Permit Nos. 075-0044, -0045, and -0046, Part I.A.1.f.]

b. Monitoring Requirements

- i. The Permittee shall continuously monitor the furnace temperature as measured in the boiler bank area. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.D.]
- ii. The Permittee shall use redundant thermocouples for measuring the furnace temperature. Defective thermocouples shall be replaced as soon as practicable. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.H.]

c. Record Keeping Requirements

- i. The Permittee shall continuously record the furnace temperature as measured in the boiler bank area. The Permittee shall use a 4-hour block averaging time. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.D.]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis using a one-hour average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

21. Oxygen

a. Limitation or Restriction

There is no operating limit for oxygen for the 3 MWCs. However, there are Monitoring, Record Keeping and Reporting requirements for each of the 3 MWCs.

b. Monitoring Requirements

- i. The Permittee shall operate a CEM system to continuously monitor O₂ of the flue gas at each location where CO₂, SO₂, or NO_x emissions are monitored. The O₂ monitors shall meet the applicable performance and quality assurance requirements of 40 CFR 60, Appendix B, Performance Specification 3; 40 CFR 60, Appendix F, Procedure 1; and 40 CFR 60.13. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.A. and RCSA §22a-174-38(j)(1)(B)]
- ii. The Permittee shall comply with the following minimum data requirements [RCSA §22a-174-38(j)(2)(A), (C), (D), & (F)]:
 - (A) Data available for O₂ CEM shall not be less than 90% of the total operating hours in any one calendar quarter and shall not be less than 95% of the total operating hours in any one calendar year.
 - (B) Obtain valid 1-hour averages for 75% of the operating hours per day for 90% of the operating days per calendar quarter during which each unit combusts any MSW.
 - (C) At least 3 equally spaced data points per hour shall be used to calculate a one-hour average.

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(D) The percentage of data available shall be calculated as follows: (i) In accordance with the procedures specified on forms furnished or prescribed by the commissioner, and (ii) Using all data obtained from a CEM to calculate emissions concentrations and percent reductions as required by RCSA §22a-174-38 regardless of whether the minimum data availability requirements of RCSA §22a-174-38(j)(2)(A) and (B) are obtained.

c. Record Keeping Requirements

- i. The Permittee shall operate a CEM system to continuously record O₂. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.A.]
- ii. The results of daily calibrations and quarterly accuracy determinations for O₂ CEM systems shall be recorded. [RCSA §22a-174-38(k)(8)]
- iii. The Permittee shall maintain records of the information specified in Section III.A.21.c.ii. of this Title V Permit, labeling each record with the calendar date on which the data was generated. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall review all recorded CEM data daily and shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures no later than 10 days after such deviation commenced. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.F. and RCSA §22a-174-33(p)(1)]
- ii. The Permittee shall report all CEM data to the commissioner on a quarterly basis using a one-hour average. [NSR Permit Nos. 075-0044, -0045, and -0046, Part III.I.]
- iii. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

22. Operator Training and Certification

a. Limitation or Restriction

- i. The Permittee shall not cause or allow the plant to be operated at any time unless a certified chief operator or shift operator is physically present at the plant. Operators shall be certified by the commissioner under RCSA §22a-231-1 and shall be identified as either a Class I or Class II chief operator or a Class I or Class II shift operator. All chief operators and shift operators must satisfactorily complete an operator training course conducted by the commissioner as set forth in RCSA §22a-174-38(h)(3). The equipment operators shall be trained in the operation and maintenance of both the fuel burning and pollution control equipment. [RCSA §22a-174-38(h)(1)-(3) and NSR Permit Nos. 075-0044, -0045, and -0046, Part V.A.]

b. Record Keeping Requirements

- i. The Permittee shall make and keep records of the date, the time of the shift, the name of the supervisor of that shift and the supervisor's operator certification. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.8.]
- ii. Operator training and certification records shall be maintained on an annual basis, as follows [RCSA §22a-174-38(k)(2)]:
 - (A) The names of the chief operators and shift operators, certified by the commissioner, and employed at the plant, including the dates of initial and renewal certifications and documentation of current certification
 - (B) The names of the chief operators and shift operators who have completed an operator training course as required under RCSA §22a-174-38(h)(3)
 - (C) The names of the persons at the plant who have completed a training program as required under RCSA §22a-174-38(h)(5)

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- iii. The Permittee shall maintain records of the information specified in Section III.A.22.b.ii. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

c. Reporting Requirements

- i. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

23. MWC O&M Manual

a. Limitation or Restriction

- i. The Permittee shall maintain an MWC Operating & Maintenance (O&M) Manual that shall be updated on a yearly basis. The Permittee shall submit any revision to this manual which conflicts or may conflict with any condition of this permit to the commissioner for review and shall receive the commissioner's written approval prior to incorporating such revision in the O&M Manual. [NSR Permit Nos. 075-0044, -0045, and -0046, Part V.B.]
- ii. The Permittee shall establish a training program to review the O&M Manual with each person who has responsibilities affecting the operation of the plant. The training program shall be repeated on an annual basis for each person. [NSR Permit Nos. 075-0044, -0045, and -0046, Part V.C.]
- iii. The Permittee shall develop a site-specific MWC O&M Manual with an index or revise an existing operating and maintenance manual to meet the requirements of RCSA §22a-174-38. Such MWC O&M Manual shall be updated on an annual basis. The MWC O&M Manual shall include [RCSA §22a-174-38(h)(4)]:
 - (A) A summary of the applicable emission limits and operational requirements
 - (B) A description of basic combustion theory application to an municipal waste combustor unit
 - (C) Procedures for receiving, handling, and feeding municipal solid waste
 - (D) Procedures for startup, shutdown, and malfunction
 - (E) Procedures for maintaining proper combustion air supply levels
 - (F) Procedures for operating the combustor within the standards established under RCSA §22a-174-38
 - (G) Procedures for responding to periodic upset or off-specification conditions
 - (H) Procedures for minimizing particulate matter carryover
 - (I) Procedures for handling ash
 - (J) Procedures for monitoring emissions
 - (K) Procedures for reporting and record keeping
- iv. The Permittee shall establish a training program to review the MWC O&M Manual with each person who has responsibilities affecting the operation of a MWC plant including, but not limited to, the chief operator, shift operator, ash handler, maintenance employee, and crane/load handler. The Permittee shall train new employees with the job positions identified in RCSA §22a-174-38(h)(5) prior to each new employee's assumption of any responsibilities at a MWC plant. The Permittee shall train those who presently are employed in the job position identified above within one year after the effective date of RCSA §22a-174-38. Following initial training, the training program shall be repeated on an annual basis for each person identified above. [RCSA §22a-174-38(h)(5)]
- v. The O&M Manual shall be kept in a location readily accessible to all persons identified in RCSA §22a-174-38(h)(5) and shall be available for inspection by the commissioner or Administrator upon request. [RCSA §22a-174-38(h)(6)]

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c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the name of each person that has reviewed the operating manual, the date of the initial review and the date of the annual review. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.8.]
- ii. Operator training and certification records shall be maintained on an annual basis, as follows [RCSA §22a-174-38(k)(2)]:
 - (A) The names of the chief operators and shift operators, certified by the commissioner, and employed at the plant, including the dates of initial and renewal certifications and documentation of current certification
 - (B) The names of the chief operators and shift operators who have completed an operator training course as required under RCSA §22a-174-38(h)(3)
 - (C) The names of the persons at the plant who have completed a training program as required under RCSA §22a-174-38(h)(5).
- iii. The Permittee shall maintain records of the information specified in Section III.A.23.c.ii. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall submit any revision to this manual which conflicts or may conflict with any condition of NSR Permit Nos. 075-0044, -0045, and -0046 to the commissioner for review and shall receive the commissioner's written approval prior to incorporating such revision in the O&M Manual. [NSR Permit Nos. 075-0044, -0045, and -0046, Part V.B.]

24. Boiler Tube Maintenance

a. Limitation or Restriction

- i. The Permittee shall clean the boiler tubes at least twice per year. Additionally, the facility shall clean the boiler tubes when it is determined that the air flow through the boiler has become restricted due to ash build up on the boiler tubes. This determination will be based on a regular evaluation of the boiler draft and pressure drops. Cleaning of the boiler tubes may be done via online water washing. [NSR Permit Nos. 075-0044, -0045, and -0046, Part V.D.]

b. Monitoring Requirements

- i. The Permittee shall evaluate the condition of the boiler tubes based on boiler draft and pressure drops at a regular interval. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the dates on which the condition of the boiler tubes is evaluated based on boiler draft and pressure drops, the name of the inspector and the evaluation of the condition of the boiler tubes. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.10.]
- ii. The Permittee shall make and keep records of the dates on which cleaning of the boiler tube heat transfer surfaces is performed. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.11.]

d. Reporting Requirements

- i. The Permittee shall keep all records required by this permit on premises for a period of no less than 5 years and shall make such records available to the commissioner upon request. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.B.14.]

Section III: Applicable Requirements and Compliance Demonstration

B. EMISSIONS UNIT 4 (EU-4) – ASH HANDLING SYSTEM

1. Fugitive Ash Emissions

a. Limitation or Restriction

- i. Except during periods of maintenance and repair of ash conveying systems, the visible emissions to the atmosphere from the conveyance or transfer of combustion ash shall be limited to 5% of the observation period (i.e., 9 minutes per 3-hour period), as set forth in RCSA §22a-174-38(i)(4)(I). During periods of maintenance and repair of the ash conveyance systems all reasonable measures to control fugitive emissions from this MWC shall be implemented. This emission limitation shall not apply to visible emissions discharged inside buildings or within enclosures of ash conveying systems, however the limitation shall apply to visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems. [RCSA §22a-174-38(f) and NSR Permit Nos. 075-0044, -0045, and -0046, Part VIII.D.]

b. Monitoring Requirements

- i. Following the date that the initial performance tests for fugitive ash are completed, the Permittee shall conduct an annual performance test for these pollutants no less than 9 calendar months and no more than 15 calendar months following the previous performance test. [RCSA §22a-174-38(i)(2)]
- ii. Testing for fugitive ash emissions shall be conducted in accordance with the following procedures [RCSA §22a-174-38(i)(4)(I)]:
 - (A) 40 CFR Part 60, Appendix A, Reference Method 22 shall be used for determining compliance with the fugitive ash emissions limit
 - (B) The minimum observation time shall be a series of 3 one-hour observations
 - (C) The observation period shall include representative operational times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks

c. Record Keeping Requirements

- i. The test reports and supporting calculations documenting the results of all annual performance tests conducted to determine compliance with the emission limits specified in RCSA §22a-174-38 for fugitive ash shall be recorded. [RCSA §22a-174-38(k)(10)]
- ii. The Permittee shall maintain records of the information specified in Section III.B.1.c.i. of this Title V Permit, labeling each record with the calendar date on which the data was generated. Each record shall be maintained for a period of at least 5 years from the date the record was created. [RCSA §22a-174-38(k)(1)]

d. Reporting Requirements

- i. The Permittee shall submit an annual report to the commissioner no later than January 30 of each year following the calendar year in which the data were collected. Each annual report shall include a list of the fugitive ash emission levels achieved during all initial and annual performance tests. [RCSA §22a-174-38(l)(3)(A)(i) and NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.3.]
- ii. The Permittee shall provide written notification to the commissioner within 72 hours of the time at which the Permittee receives information regarding performance test results indicating that any fugitive ash emission levels exceed the applicable pollutant emission limits or standards defined in RCSA §22a-174-38. [NSR Permit Nos. 075-0044, -0045, and -0046, Part IV.C.5. and RCSA §22a-174-38(l)(6)]

Section III: Applicable Requirements and Compliance Demonstration

C. PREMISES-WIDE GENERAL REQUIREMENTS

Premises-Wide General Requirements

1. **Annual Emission Statements** : The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4(d)(1).
2. **Emergency Episode Procedures**: The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
3. **Reporting of Malfunctioning Control Equipment**: The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
4. **Prohibition of Air Pollution**: The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
5. **Public Availability of Information**: The public availability of information shall apply, as set forth in RCSA §22a-174-10.
6. **Prohibition Against Concealment/ Circumvention**: The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
7. **Violations and Enforcement**: The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
8. **Variances**: The Permittee may apply to the commissioner for a variance from one or more of the provisions of these regulations as set forth in RCSA §22a-174-13.
9. **No Defense to Nuisance Claim**: The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.
10. **Severability**: The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
11. **Responsibility to Comply**: The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
12. **Particulate Emissions**: The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18. (Section 18 approved by EPA on 9-23-1982, current Regulation submitted to EPA on 12-1-2004.)
13. **Mobile Sources**: Mobile sources present at the facility shall comply with the standards for mobile sources as set forth in RCSA §22a-174-18(b)(3).
13. **Sulfur Compound Emissions**: The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §22a-174-19.
14. **Organic Compound Emissions**: The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
15. **Nitrogen Oxide Emissions**: The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22.
16. **Ambient Air Quality**: The Permittee shall not cause or contribute to a violation of an ambient air quality standard as set forth in RCSA §22a-174-24(b).
17. **Emission Fees**: The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
18. **Municipal Waste Combustors**: The Permittee shall comply with the standards for Municipal Waste Combustors as set forth in RCSA §22a-174-38.

Section V: State Enforceable Terms and Conditions

Only the Commissioner of the Department of Energy and Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this section.

State Enforceable Terms and Conditions

- A.** This Title V permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Energy and Environmental Protection or any federal, local or other state agency. Nothing in this Title V permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this Title V permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- C.** Odors: The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA §22a-174-23.
- D.** Noise: The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA §§22a-69-1 through 22a-69-7.4, inclusive.
- E.** Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- F.** Open Burning: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
- G.** Fuel Sulfur Content: The Permittee shall not use No.2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS §16a-21a.

Section VI: Title V Requirements

The Administrator of the United States Environmental Protection Agency and the Commissioner of the Department of Energy and Environmental Protection have the authority to enforce the terms and conditions contained in these sections.

Title V Requirements

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

The date of submission to the commissioner of any document required by this Title V permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this Title V permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this Title V permit, the word "day" means calendar day. Any document or action which is required by this Title V permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the commissioner under this Title V permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of the Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; EPA-New England, Region 1; 5 Post Office Square, Suite 100; Boston, Massachusetts 02109-3912.

B. CERTIFICATIONS [RCSA §22a-174-33(b)]

In accordance with RCSA §22a-174-33(b), any report or other document required by this Title V permit and any other information submitted to the commissioner or Administrator shall be signed by an individual described in RCSA §22a-174-2a(a), or by a duly authorized representative of such individual. Any individual signing any document pursuant to RCSA §22a-174-33(b) shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in RCSA §22a-174-2a(a)(4):

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.”

C. SIGNATORY RESPONSIBILITY [RCSA §22a-174-2a(a)]

For purposes of signing any Title V-related application, document, report or certification required by RCSA §22a-174-33, any corporation's duly authorized representative may be either a named individual or any individual occupying a named position. Such named individual or individual occupying a named position is a duly authorized representative if such individual is responsible for the overall operation of one or more manufacturing, production or operating facilities subject to RCSA §22a-174-33 and either:

1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding 25 million dollars in second quarter 1980 dollars; or
2. The delegation of authority to the duly authorized representative has been given in writing by an officer of

Section VI: Title V Requirements

Title V Requirements

the corporation in accordance with corporate procedures and the following:

- i. Such written authorization specifically authorizes a named individual, or a named position, having responsibility for the overall operation of the Title V premises or activity,
- ii. Such written authorization is submitted to the commissioner and has been approved by the commissioner in advance of such delegation. Such approval does not constitute approval of corporate procedures, and
- iii. If a duly authorized representative is a named individual in an authorization submitted under subclause ii. of this subparagraph and a different individual is assigned or has assumed the responsibilities of the duly authorized representative, or, if a duly authorized representative is a named position in an authorization submitted under subclause ii. of this subparagraph and a different named position is assigned or has assumed the duties of the duly authorized representative, a new written authorization shall be submitted to the commissioner prior to or together with the submission of any application, document, report or certification signed by such representative.

D. ADDITIONAL INFORMATION [RCSA §22a-174-33(j)(1)(X), RCSA §22a-174-33(h)(2)]

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending this Title V permit or to determine compliance with this Title V permit.

In addition, the Permittee shall submit information to address any requirements that become applicable to the subject source and shall submit correct, complete, and sufficient information within 15 days of the applicant's becoming aware of any incorrect, incomplete, or insufficient submittal, during the pendency of the application, or any time thereafter, with an explanation for such deficiency and a certification pursuant to RCSA Section 22a-174-2a(a)(5).

E. MONITORING REPORTS [RCSA §22a-174-33(o)(1)]

A Permittee, required to perform monitoring pursuant this Title V permit, shall submit to the commissioner, on forms prescribed by the commissioner, written monitoring reports on March 1 and September 1 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

1. Each deviation caused by upset or control equipment deficiencies; and
2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this permit, which has occurred since the date of the last monitoring report; and
3. Each deviation caused by a failure of the monitoring system to provide reliable data.

F. PREMISES RECORDS [RCSA §22a-174-33(o)(2)]

Unless otherwise required by this Title V permit, the Permittee shall make and keep records of all required monitoring data and supporting information for at least five years from the date such data and information were obtained. The Permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

1. The type of monitoring or records used to obtain such data, including record keeping;
2. The date, place, and time of sampling or measurement;
3. The name of the individual who performed the sampling or the measurement and the name of such

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individual's employer;

4. The date(s) on which analyses of such samples or measurements were performed;
5. The name and address of the entity that performed the analyses;
6. The analytical techniques or methods used for such analyses;
7. The results of such analyses;
8. The operating conditions at the subject source at the time of such sampling or measurement; and
9. All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

G. PROGRESS REPORTS [RCSA §22a-174-33(q)(1)]

The Permittee shall, on March 1 and September 1 of each year, or on a more frequent schedule if specified in this Title V permit, submit to the commissioner a progress report on forms prescribed by the commissioner, and certified in accordance with RCSA §22a-174-2a(a)(5). Such report shall describe the Permittee's progress in achieving compliance under the compliance plan schedule contained in this Title V permit. Such progress report shall:

1. Identify those obligations under the compliance plan schedule in this Title V permit which the Permittee has met, and the dates on which they were met; and
2. Identify those obligations under the compliance plan schedule in this Title V permit which the Permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the Permittee expects to meet them.

Any progress report prepared and submitted pursuant to RCSA §22a-174-33(q)(1) shall be simultaneously submitted by the Permittee to the Administrator.

H. COMPLIANCE CERTIFICATIONS [RCSA §22a-174-33(q)(2)]

The Permittee shall, on March 1 of each year, or on a more frequent schedule if specified in this Title V permit, submit to the commissioner a written compliance certification certified in accordance with RCSA §22a-174-2a(a)(5) and which includes the information identified in 40 CFR 70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to RCSA §22a-174-33(q)(2) shall be simultaneously submitted by the Permittee to the Administrator.

I. PERMIT DEVIATION NOTIFICATIONS [RCSA §22a-174-33(p)]

Notwithstanding Subsection D of Section VII of this Title V permit, the Permittee shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than 24 hours after such deviation commenced; and
2. For any other regulated air pollutant, no later than ten days after such deviation commenced.

J. PERMIT RENEWAL [RCSA §22a-174-33(j)(1)(B)]

All of the terms and conditions of this Title V permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with RCSA §§22a-174-33(g), -33(h), and -33(i).

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K. OPERATE IN COMPLIANCE [RCSA §22a-174-33(j)(1)(C)]

The Permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of this Title V permit, and any other applicable provisions of law. In addition, any noncompliance constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

L. COMPLIANCE WITH PERMIT [RCSA §22a-174-33(j)(1)(G)]

This Title V permit shall not be deemed to:

1. Preclude the creation or use of emission reduction credits or allowances or the trading thereof in accordance with RCSA §§22a-174-33(j)(1)(I) and 22a-174-33(j)(1)(P), provided that the commissioner's prior written approval of the creation, use, or trading is obtained;
2. Authorize emissions of an air pollutant so as to exceed levels prohibited pursuant to 40 CFR Part 72;
3. Authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or
4. Impose limits on emissions from items or activities specified in RCSA §§22a-174-33(g)(3)(A) and (B) unless imposition of such limits is required by an applicable requirement.

M. INSPECTION TO DETERMINE COMPLIANCE [RCSA §22a-174-33(j)(1)(M)]

The commissioner may, for the purpose of determining compliance with this Title V permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under such permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with this Title V permit. It shall be grounds for permit revocation should entry, inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

N. PERMIT AVAILABILITY

The Permittee shall have available at the facility at all times a copy of this Title V permit.

O. SEVERABILITY CLAUSE [RCSA §22a-174-33(j)(1)(R)]

The provisions of this Title V permit are severable. If any provision of this Title V permit or the application of any provision of this Title V permit to any circumstance is held invalid, the remainder of this Title V permit and the application of such provision to other circumstances shall not be affected.

P. NEED TO HALT OR REDUCE ACTIVITY [RCSA §22a-174-33(j)(1)(T)]

It shall not be a defense for the Permittee 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 Title V permit.

Q. PERMIT REQUIREMENTS [RCSA §22a-174-33(j)(1)(V)]

The filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the Permittee's obligation to comply with this Title V permit.

R. PROPERTY RIGHTS [RCSA §22a-174-33(j)(1)(W)]

This Title V permit does not convey any property rights or any exclusive privileges. This Title V permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the

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State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including CGS §4-181a(b) and RCSA §22a-3a-5(b). This Title V permit shall neither create nor affect any rights of persons who are not parties to this Title V permit.

S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA §22a-174-33(o)(3)]

The Permittee shall, contemporaneously with making a change authorized by this Title V permit from one alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one operating scenario to another and shall maintain a record of the current alternative operating scenario.

T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA §22a-174-33(r)(2)]

The Permittee may engage in any action allowed by the Administrator in accordance with 40 CFR 70.4(b)(12)(i) to (iii)(B) inclusive, and 40 CFR 70.4(b)(14)(i) to (iv), inclusive without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision provided such action does not:

1. Constitute a modification under 40 CFR Part 60, 61 or 63,
2. Exceed emissions allowable under the subject permit,
3. Constitute an action which would subject the Permittee to any standard or other requirement pursuant to 40 CFR Parts 72 to 78, inclusive, or
4. Constitute a non-minor permit modification pursuant to RCSA §22a-174-2a(d)(4).

At least seven days before initiating an action specified in RCSA §22a-174-33(r)(2)(A), the Permittee shall notify the Administrator and the commissioner in writing of such intended action.

U. INFORMATION FOR NOTIFICATION [RCSA §22a-174-33(r)(2)(A)]

Written notification required under RCSA §22a-174-33(r)(2)(A) shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The Permittee shall thereafter maintain a copy of such notice with the Title V permit. The commissioner and the Permittee shall each attach a copy of such notice to their copy of the Title V permit.

V. TRANSFERS [RCSA §22a-174-2a(g)]

No person other than the Permittee shall act or refrain from acting under the authority of this Title V permit unless such permit has been transferred to another person in accordance with RCSA §22a-174-2a(g).

The proposed transferor and transferee of a permit shall submit to the commissioner a request for a permit transfer on a form provided by the commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS §22a-6m.

W. REVOCATION [RCSA §22a-174-2a(h)]

The commissioner may revoke this Title V permit on his own initiative or on the request of the Permittee or any other person, in accordance with CGS §4-182(c), RCSA §22a-3a-5(d), and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The Permittee requesting revocation of this Title V permit shall state the requested date of revocation and provide evidence satisfactory to

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the commissioner that the subject source is no longer a Title V source.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this Title V permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this Title V permit if the Administrator has determined that the commissioner failed to act in a timely manner on a permit renewal application.

This Title V permit may be modified, revoked, reopened, reissued, or suspended by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(r), CGS §22a-174c, or RCSA §22a-3a-5(d).

X. REOPENING FOR CAUSE [RCSA §22a-174-33(s)]

This Title V permit may be reopened by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(s).

Y. CREDIBLE EVIDENCE

Notwithstanding any other provision of this Title V permit, for the purpose of determining compliance or establishing whether a Permittee has violated or is in violation of any permit condition, nothing in this Title V permit shall preclude the use, including the exclusive use, of any credible evidence or information.