



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	075-0246-TV
Client/Sequence/Town/Premises Numbers	1046/1/75/505
Date Issued	January 13, 2023
Expiration Date	January 13, 2028

Corporation:

The Metropolitan District

Premises Location:

*Hartford Water Pollution Control Facility
240 Brainard Road, Hartford, CT 06114*

Name of Responsible Officials and Title:

*Scott Jellison, P.E., Chief Executive Officer
Thomas Tyler, P.E., Director of Facilities*

All the following attached pages, 2 through 91, are hereby incorporated by reference into this Title V permit.

for

Katherine S. Dykes
Commissioner

January 13, 2023

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>
ASC	Actual Stack Concentration
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
As	Arsenic
Be	Beryllium
bhp	Brake Horsepower
Cd	Cadmium
CO ₂	Carbon Dioxide
CO	Carbon Monoxide
CDX	Central Data Exchange
Cr	Chromium
CFR	Code of Federal Regulations
CEDRI	Compliance and Emissions Data Reporting Interface
CAM	Compliance Assurance Monitoring
CI	Compression Ignition
CGS	Connecticut General Statutes
CEM	Continuous Emissions Monitor
CEMS	Continuous Emissions Monitoring System
Cu	Copper
ft ³	Cubic Feet
DAS	Data Acquisition System
°F	Degrees Fahrenheit
DEEP	Department of Energy and Environmental Protection
dscm	Dry Standard Cubic Meter
DT	Dry Ton
ERT	Electronic Reporting Tool
EU	Emission Unit
EPA	Environmental Protection Agency
FIRE	Factor Information Retrieval Software
FGR	Flue Gas Recirculation
gal	Gallon
GC	Gas Chromatography
GEU	Grouped Emission Unit
HWPCF	Hartford Water Pollution Control Facility
HAP	Hazardous Air Pollutant
hr	Hour
ITT	Intent to Test
ICE	Internal Combustion Engine
kW	Kilowatt
Pb	Lead
L	Liter

LIST OF ABBREVIATIONS/ACRONYMS, continued

<i>Abbreviation/Acronym</i>	<i>Description</i>
lb	Pound
Mn	Manganese
MS	Mass Spectroscopy
MSDS	Material Safety Data Sheets
MASC	Maximum Allowable Stack Concentration
MW	Megawatts
Hg	Mercury
MDC	Metropolitan District
µg/m ³	Micrograms per Cubic Meter
MM	Million
MMBTU	Million British Thermal Units
mg	Milligram
min	Minute
ng	Nanograms
NAAQS	National Ambient Air Quality Standards
NFPA	National Fire Protection Association
NSPS	New Source Performance Standards
NSR	New Source Review
Ni	Nickel
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NERC	North American Electric Reliability Corporation
NTE	Not To Exceed
O ₂	Oxygen
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 microns in diameter
ppmv	Parts per Million, Volumetric Basis
ppmvd	Parts per Million, Volumetric Basis Dry
PTC	Performance Test Code
pH	Potential of Hydrogen
RCSA	Regulations of Connecticut State Agencies
Se	Selenium
SSI	Sewage Sludge Incinerator
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxides
TPY	Tons per Year
UV	Ultraviolet
VFD	Variable Frequency Drive
VOC	Volatile Organic Compound
yr	Year
Zn	Zinc

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Publicly Owned Treatment Works

Primary Standard Industrial Classification Code: 4952

Facility Mailing Address: The Metropolitan District
555 Main Street
Hartford, CT 06103

Telephone Number: 860-278-7850

B. PREMISES DESCRIPTION

The Metropolitan District (MDC) owns and operates the Hartford Water Pollution Control Facility (HWPCF), a 60 million gallon per day activated sludge municipal wastewater treatment facility. The facility has three Nichols-Herreshoff multiple hearth sludge incinerators and several emergency generators. The facility also houses settling tanks, aeration tanks, thickening tanks, holding tanks, sludge centrifuges and natural gas boilers that are not subject to permits.

There is a heat recovery facility consisting of two boilers and a steam turbine-generator which are used to take the waste heat energy from the incinerators to produce electricity. There are no air emissions associated with this part of the process.

MDC is a Title V source because potential and actual nitrogen oxides (NO_x) emissions exceed the major source threshold. MDC is located in a serious ozone non-attainment area as defined in RCSA §22a-174-1(105). In addition, MDC is a Title V source because the sewage sludge incinerators are subject to:

40 CFR Part 60, Subpart O	Standards of Performance for Sewage Treatment Plants
40 CFR Part 60, Subpart LLLL	Standards of Performance for New Sewage Sludge Incineration Units
40 CFR Part 61, Subpart C	National Emission Standards for Beryllium
40 CFR Part 61, Subpart E	National Emission Standards for Mercury
40 CFR Part 503, Subpart E	Technical Standards for the Use and Disposal of Sewage Sludge Incineration

Four engines are subject to:

40 CFR Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
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Section II: Emissions Units Information

A. EMISSIONS UNITS DESCRIPTION

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

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit	Emissions Unit Description	Control Unit Description	Monitoring Unit Description	Permit or Regulation Number
EU-001	Nichols-Herreshoff Multiple Hearth Sludge Incinerator, No. 1, Serial No. 47674 Installation Date: 8/1/72 Maximum Rated Capacity: 2.5 DT/hr	Venturi Pak Scrubber Impingement Plate Scrubber Flue Gas Recirculation Zero Hearth Afterburner	CO CEM Combustion temperature Scrubber liquid pH Scrubber pressure drop Scrubber tray water flow Afterburner temperature Stack oxygen Stack moisture Sludge moisture Sludge throughput Auxiliary fuel usage	Permit No. 075-0006 CGS §22a-191a 40 CFR Part 60, Subparts O and LLLL 40 CFR Part 61, Subparts C and E 40 CFR Part 503, Subpart E
EU-002	Nichols-Herreshoff Multiple Hearth Sludge Incinerator, No. 2, Serial No. 47673	Venturi Pak Scrubber	CO CEM	Permit No. 075-0007

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit	Emissions Unit Description	Control Unit Description	Monitoring Unit Description	Permit or Regulation Number
	Installation Date: 8/1/72 Maximum Rated Capacity: 2.5 DT/hr	Impingement Plate Scrubber Flue Gas Recirculation Zero Hearth Afterburner	Combustion temperature Scrubber liquid pH Scrubber pressure drop Scrubber tray water flow Afterburner temperature Stack oxygen Stack moisture Sludge moisture Sludge throughput Auxiliary fuel usage	CGS §22a-191a 40 CFR Part 60, Subparts O and LLLL 40 CFR Part 61, Subparts C and E 40 CFR Part 503, Subpart E
EU-003	Nichols-Herreshoff Multiple Hearth Sludge Incinerator, No.3, Serial No. 47675 Installation Date: 8/1/72 Maximum Rated Capacity: 2.5 DT/hr	Venturi Pak Scrubber Impingement Plate Scrubber Flue Gas Recirculation	CO CEM Combustion temperature Scrubber liquid pH Scrubber pressure drop	Permit No. 075-0008 CGS §22a-191a 40 CFR Part 60, Subparts O and LLLL 40 CFR Part 61, Subparts C and E

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit	Emissions Unit Description	Control Unit Description	Monitoring Unit Description	Permit or Regulation Number
		Zero Hearth Afterburner	Scrubber tray water flow Afterburner temperature Stack oxygen Stack moisture Sludge moisture Sludge throughput Auxiliary fuel usage	40 CFR Part 503, Subpart E
EU-023	UV Facility Emergency Generator-Caterpillar Model C32 DITA Diesel Engine Generator Set Installation Date: 3/2012 Maximum Rated Capacity: 1000 kW (1474 bhp)	None	Non-Resettable Hour Meter	RCSA §22a-174-3b 40 CFR Part 60, Subpart IIII
EU-026	Headworks Emergency Generator No. 1-Cummins Model DQKAN, Serial No. P15K105590 Installation Date: 1/27/16 Maximum Rated Capacity: 2.5 MW (3640 bhp)	None	Non-Resettable Hour Meter	RCSA §22a-174-3b 40 CFR Part 60, Subpart IIII
EU-027	Headworks Emergency Generator No. 2-Cummins Model DQKAN,	None	Non-Resettable	RCSA §22a-174-3b

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit	Emissions Unit Description	Control Unit Description	Monitoring Unit Description	Permit or Regulation Number
	Serial No. P15L106270 Installation Date: 1/27/16 Maximum Rated Capacity: 2.5 MW (3640 bhp)		Hour Meter	40 CFR Part 60 Subpart IIII
EU-028	Headworks Emergency Generator No. 3-Cummins Model DQKAN, Serial No. P15L106240 Installation Date: 1/27/16 Maximum Rated Capacity: 2.5 MW (3640 bhp)	None	Non-Resettable Hour Meter	RCSA §22a-174-3b 40 CFR Part 60, Subpart IIII

B. GROUPED EMISSIONS UNITS DESCRIPTION

Grouped emissions units are set forth in Table II.B.

TABLE II.B: GROUPED EMISSIONS UNITS DESCRIPTION		
Grouped Emissions Unit	Emissions Unit	Description
GEU-001	EU-001 through EU-003	Sewage Sludge Incinerator Nos. 1 through 3
GEU-003	EU-026 through EU-028	Headworks Emergency Generator Nos. 1 through 3

C. OPERATING SCENARIO IDENTIFICATION

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

Section II: Emissions Units Information

TABLE II.C: OPERATING SCENARIO IDENTIFICATION	
Emissions Units Associated with the Scenario	Description of Scenario
GEU-001	The Permittee operates no more than two of three Nichols-Herreshoff Multiple hearth sludge incinerators at any one time by using sewage sludge as the primary fuel and natural gas or propane as auxiliary fuel.
EU-023 and GEU-003	The Permittee operates four emergency generators in support of facility operations

Section III: Applicable Requirements and Compliance Demonstration

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

A. GEU-001 (Nichols-Herreshoff Multiple Hearth Sludge Incinerator Nos. 1, 2 & 3)

Permit or Regulation Number: Permit Nos. 075-0006, 075-0007 and 075-0008; CGS §22a-191a; 40 CFR Part 60, Subparts O and LLLL; 40 CFR Part 61, Subparts C and E; 40 CFR Part 503, Subpart E

All conditions in Section III.A of this permit apply to each incinerator individually unless otherwise noted.

1. Allowable Primary Fuels

a. *Limitation or Restriction*

Only sewage sludge may be fired in this unit. Any substance which is considered “municipal-type solid waste,” as defined in 40 CFR, Part 60, §60.51a, or “hazardous waste,” as defined in §22a-115 of the Connecticut General Statutes, is prohibited from being introduced to this unit. For the purposes of this permit, sewage sludge is defined as any solid, semi-solid or liquid residue from the pretreatment or primary, secondary or advanced treatment of domestic sewage, industrial wastewater, septage, portable toilet pumpings and grease traps. [Permit Nos. 075-0006, 075-0007 and 075-0008]

b. *Monitoring Requirements*

Record keeping specified in Section III.A.1.c. of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. *Record Keeping Requirements*

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.A.1.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. *Reporting Requirements*

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. [RCSA §22a-174-33(j)(1)(X)]

2. Sludge Charging Rate

a. *Limitation or Restriction*

- i. The maximum hourly sludge charging rate shall not exceed 2.5 DT/hr based on a 30 day average per incinerator. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The maximum annual sludge charging rate shall not exceed 21,060 DT/yr based on a 12-month rolling average per incinerator. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- iii. Only two of the three Nichols-Herreshoff Incinerators may incinerate sewage sludge at the same time. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- iv. The maximum annual sludge charging rate for the facility is 42,120 DT/yr.

Section III: Applicable Requirements and Compliance Demonstration

[Permit Nos. 075-0006, 075-0007 and 075-0008]

b. Monitoring Requirements

- i. The Permittee shall install, calibrate, maintain and operate a flow measuring device which can be used to determine either the mass or volume of sludge charged to the incinerator. The flow device shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over the operating range.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(a)(1)]
- ii. The Permittee shall continuously measure and record the mass or volume of sludge charged to the incinerator. [40 CFR §60.153(a)(1)]
- iii. The Permittee shall provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained. [40 CFR §60.153(a)(2)]
- iv. The Permittee shall collect and analyze a grab sample of the sludge fed to the incinerator once per day. The dry sludge content and the volatile solids content of the sample shall be determined in accordance with the method specified under 40 CFR §60.154(b)(5), except that the determination of volatile solids, step (3)(b) of the method, shall not be deleted.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(b)(5)]
- v. The Permittee shall continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. [40 CFR §60.4850(f)(1)]
- vi. The Permittee shall take at least one grab sample per day of the sewage sludge fed to the sewage sludge incinerator. If more than one grab sample is taken in a day, the Permittee shall calculate the daily average for the grab samples. [40 CFR §60.4850(f)(2)]
- vii. *Performance testing requirements*-During each test run specified in 40 CFR §60.4900(a)(1), the Permittee shall operate the sewage sludge incinerator at a minimum of 85% of the maximum permitted capacity. [40 CFR §60.4900(a)(11)]

c. Record Keeping Requirements

- i. The sludge hourly charging rate shall be based on a 30 day average as determined either by the product of the mass of wet sludge cake fed per unit time to the incinerator times the solids fraction or the product of the volumetric feed (in gallons of total wet feed per hour) times the density of wet feed to the dewatering operation times the solids fraction measured by the daily grab sample.
[Permit Nos. 075-0006, 075-0007 and 075-0008; RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall make and keep calibration and maintenance records and original instrument recordings for all continuous monitoring instruments and equipment.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- iii. Annual sludge charge rate shall be calculated on a 12 month rolling average basis obtained by adding the current month's charge rate to that of the previous 11 months. These calculations shall be performed monthly. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- iv. The Permittee shall make and keep records of the rate of sludge charged to the incinerator in accordance with 40 CFR §60.153(c)(3).
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(c)(3); 40 CFR §503.47(i)]

Section III: Applicable Requirements and Compliance Demonstration

- v. *Continuous monitoring data*- The Permittee shall maintain the following records for a period of at least five years. All records shall be available on site in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator. Records of the following data: All daily average values recorded for the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, monitored and calculated as specified in 40 CFR §60.4850(f).
[40 CFR §§60.4850(f)(1) and (2); 40 CFR §60.4910(f)(3)(ii)]
- vi. *Performance testing requirements*-The Permittee shall document that the dry sludge burned during the performance test is representative of the sludge burned under normal operating conditions by:
[40 CFR §60.4900(a)(2)]
 - (A) Maintaining a log of the quantity of sewage sludge burned during the performance test by continuously monitoring and recording the average hourly rate that sewage sludge is fed to the incinerator. [40 CFR §60.4900(a)(2)(i)]
 - (B) Maintaining a log of the moisture content of the sewage sludge burned during the performance test by taking grab samples of the sewage sludge fed to the incinerator for each eight hour period that testing is conducted. [40 CFR §60.4900(a)(2)(ii)]

d. *Reporting Requirements*

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. [RCSA §22a-174-33(j)(1)(X)]

3. Auxiliary Fuel

a. *Limitation or Restriction*

- i. The maximum auxiliary fuel firing rate shall not exceed 21,300 ft³/hr or 21.3 MMBTU/hr Natural Gas and Propane back up per incinerator.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The maximum auxiliary annual fuel usage shall not exceed 179.5 MM ft³ per incinerator.
[Permit Nos. 075-0006, 075-0007 and 075-0008]

b. *Monitoring Requirements*

The Permittee shall install, calibrate, maintain and operate a monitoring device for measuring the auxiliary fuel flow to the incinerator. The auxiliary flow measuring device shall be certified by the manufacturer to have an accuracy of ±5% over the operating range. The fuel flow measuring device shall be operated continuously. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(b)(4)]

c. *Record Keeping Requirements*

- i. The Permittee shall make and keep calibration and maintenance records and original instrument recordings for all continuous monitoring instruments and equipment.
[Permit Nos. 075-0006, 075-0007 and 075-0008]

Section III: Applicable Requirements and Compliance Demonstration

- ii. Annual auxiliary fuel consumption shall be calculated on a 12 month rolling average basis obtained by adding the current month's auxiliary fuel consumption to that of the previous 11 months for each fuel. These calculations shall be performed monthly.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- iii. The Permittee shall make and keep records of the auxiliary fuel flow to the incinerator for each fuel in accordance with 40 CFR §60.153(c)(3).
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(c)(3)]

d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

4. Operating Combustion Temperature

a. Limitation or Restriction

- i. The Permittee shall meet a site-specific operating limit for minimum operating temperature of the combustion chamber (or afterburner combustion chamber) that the Permittee establishes in accordance with 40 CFR §60.4890(a)(2)(i). [40 CFR §60.4850(a)]
- ii. The Permittee shall meet any new operating limits and requirements, re-established according to 40 CFR 60.4890(d). [40 CFR §60.4850(g)]
- iii. Operation of the incinerator shall not cause the operating combustion temperature to exceed the performance test combustion temperature by more than 20%.
[40 CFR §503.45(e)]

b. Monitoring Requirements

- i. The Permittee shall install, calibrate, maintain and operate a temperature measuring device in each hearth, including the after burner, and at the outlet of the incinerator. Each temperature device shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range. Each temperature measuring device shall be operated continuously.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(b)(3); 40 CFR §503.45(d); 40 CFR Part 64]
- ii. The Permittee shall monitor combustion chamber temperature or afterburner temperature using these minimum frequencies:
[40 CFR §60.4870(e); 40 CFR Part 60, Subpart LLLL, Table 3]
 - (A) Data measurement: Continuous
 - (B) Data recording: Every 15 minutes-This recording time refers to the minimum frequency that the continuous monitor or other measuring device initially records data. For all data recorded every 15 minutes, the Permittee shall calculate hourly arithmetic averages. For all parameters, the Permittee shall use hourly averages to calculate 12-hour block average specified in 40 CFR Part 60, Subpart LLLL, Table 3 for demonstrating compliance.

Section III: Applicable Requirements and Compliance Demonstration

- (C) Data averaging period for compliance: 12-hour block
- iii. For continuous parameter monitoring systems, the performance evaluation and acceptance criteria shall include, but is not limited to the following: [40 CFR §60.4880(a)(3)(ii)]
 - (A) If the Permittee has an operating limit that requires the use of a temperature measurement device, the Permittee shall meet the requirements in 40 CFR §60.4880 (a)(3)(ii)(D)(1-4). [40 CFR §60.4880(a)(3)(ii)(D)]
 - (1) Install the temperature sensor and other necessary equipment in a position that provides a representative temperature. [40 CFR §60.4880(a)(3)(ii)(D)(1)]
 - (2) Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0% of the temperature value, whichever is larger, for a noncryogenic temperature range. [40 CFR §60.4880(a)(3)(ii)(D)(2)]
 - (3) Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5% of the temperature value, whichever is larger, for a cryogenic temperature range. [40 CFR §60.4880(a)(3)(ii)(D)(3)]
 - (4) Conduct a temperature measurement device performance evaluation at the time of each performance test but no less frequently than annually. [40 CFR §60.4880(a)(3)(ii)(D)(4)]
- iv. The Permittee shall install, operate, calibrate, and maintain the continuous parameter monitoring systems according to the requirements in paragraphs 40 CFR §§60.4905(a)(1) and (2). [40 CFR §60.4905(a)]
 - (A) Meet the following general requirements for the operating temperature measurement device: [40 CFR §60.4905(a)(1)]
 - (1) The Permittee shall collect data using the continuous monitoring system at all times the affected SSI unit is operating and at the intervals specified in 40 CFR §60.4905(a)(1)(ii), except for periods of monitoring system malfunctions that occur during periods specified in 40 CFR §60.4880(a)(7)(i), repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). Any such periods that the Permittee does not collect data using the continuous monitoring system constitute a deviation from the monitoring requirements and shall be reported in a deviation report. [40 CFR §60.4905(a)(1)(i)]
 - (2) The Permittee shall collect continuous parameter monitoring system data in accordance with 40 CFR §60.13(e)(2). [40 CFR §60.4905(a)(1)(ii)]
 - (3) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities conducted during monitoring system malfunctions shall not be included in calculations used to report emissions or operating levels. Any such periods shall be reported in the annual deviation report. [40 CFR §60.4905(a)(1)(iii)]

Section III: Applicable Requirements and Compliance Demonstration

- (4) Any data collected during periods when the monitoring system is out of control as specified in 40 CFR §60.4880(a)(7)(i), repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or control activities conducted during out-of-control periods shall not be included in calculations used to report emissions or operating levels. Any such periods that do not coincide with a monitoring system malfunction, as defined in 40 CFR §60.4930, constitute a deviation from the monitoring requirements and shall be reported in a deviation report. [40 CFR §60.4905(a)(1)(iv)]
 - (5) The Permittee shall use all the data collected during all periods except those periods specified in 40 CFR §60.4905(a)(1)(iii) and 40 CFR §60.4905(a)(1)(iv) in assessing the operation of the control device and associated control system. [40 CFR §60.4905(a)(1)(v)]
- (B) Operate and maintain the continuous monitoring system according to the monitoring plan required under 40 CFR §60.4880. [40 CFR §60.4905(a)(2)]
- v. The Permittee shall operate and maintain the continuous parameter monitoring systems specified in 40 CFR §60.4905(a) in continuous operation according to the monitoring plan required under 40 CFR §60.4880. [40 CFR §60.4905(c)]
- vi. The Permittee shall operate the monitoring device using procedures that take into account manufacturer's specifications. [40 CFR Part 64]

c. Record Keeping Requirements

- i. The Permittee shall make and keep calibration and maintenance records and original instrument recordings for all continuous monitoring instruments and equipment. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall make and keep records of the measured temperatures of the incinerator in accordance with 40 CFR §60.153(c)(3). [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(c)(3); 40 CFR §503.47(f)]
- iii. The Permittee shall record the results of each inspection, calibration, and validation check of the continuous parameter monitoring systems. [40 CFR §60.4905(a)(1)(vi)]
- iv. The Permittee shall maintain records of 1-hour averages. [40 CFR Part 60, Subpart LLLL, Table 3]
- v. The Permittee shall automatically and continuously record the temperature in each hearth on a strip chart or digital data acquisition system averaged over each one hour incinerator operating period (at least with four data values equally spaced over each hour). [40 CFR §64.3(b)(4)(ii)]

d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X); 40 CFR Part 64]

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5. In-situ Thermal Oxidizer Operating Temperature

a. Limitation or Restriction

The in-situ thermal oxidizer nominal steady-state operating temperature is 1200°F.
[Permit Nos. 075-0006, 075-0007 and 075-0008]

b. Monitoring Requirements

- i. The Permittee shall install, calibrate, maintain and operate a temperature measuring device in each hearth, including the after burner, and at the outlet of the incinerator. Each temperature device shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range. Each temperature measuring device shall be operated continuously.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(b)(3); 40 CFR §503.45(d); 40 CFR Part 64]
- ii. The Permittee shall operate the monitoring device using procedures that take into account manufacturer's specifications. [40 CFR Part 64]

c. Record Keeping Requirements

- i. The Permittee shall make and keep calibration and maintenance records and original instrument recordings for all continuous monitoring instruments and equipment.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall make and keep daily records of the measured temperatures of the incinerator.
[40 CFR §60.153(c)(3); 40 CFR §503.47(f)]
- iii. The Permittee shall automatically and continuously record the afterburner temperature on a strip chart or digital data acquisition system averaged over each one hour incinerator operating period (at least with four data values equally spaced over each hour). [40 CFR §64.3(b)(4)(ii)]

d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X); 40 CFR Part 64]

6. VenturiPak Scrubber

a. Limitation or Restriction

- i. Liquid/Water Flow Rate
 - (A) Minimum water flow to the scrubber is 550 gal/min
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR Part 64]
- ii. Pressure Drop
 - (A) Minimum gas flow pressure drop is 20 inches of water or 30% less than the average pressure drop measured for each period of 15 minutes duration or more during the most recent

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performance test, whichever is less.

[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR Part 64]

- (B) The Permittee shall meet the site-specific operating limits that the Permittee establishes in 40 CFR §60.4870 for each operating parameter associated with each air pollution control device. [40 CFR §60.4850(b)]
- iii. The Permittee shall meet any new operating limits and requirements, re-established according to 40 CFR §60.4890(d). [40 CFR §60.4850(g)]

b. Monitoring Requirements

i. Liquid/Water Flow Rate

- (A) The Permittee shall install, calibrate, maintain and operate a monitoring device that continuously measures and records the VenturiPak scrubber tray water flow rate. This device shall be certified by the manufacturer to be accurate within $\pm 5\%$ over its operating range and shall be calibrated on an annual basis in accordance with the manufacturer's instructions. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4870(a); 40 CFR Part 60, Subpart LLLL, Table 3; 40 CFR Part 64]
- (B) The Permittee shall monitor scrubber liquid flow rate using these minimum frequencies: [40 CFR §60.4870(c); 40 CFR Part 60, Subpart LLLL, Table 3]
 - (1) Data measurement: Continuous
 - (2) Data recording: Every 15 minutes-This recording time refers to the minimum frequency that the continuous monitor or other measuring device initially records data. For all data recorded every 15 minutes, the Permittee shall calculate hourly arithmetic averages. For all parameters, the Permittee shall use hourly averages to calculate 12-hour block average specified in 40 CFR Part 60, Subpart LLLL, Table 3 for demonstrating compliance.
 - (3) Data averaging period for compliance: 12-hour block
- (C) For continuous parameter monitoring systems, the performance evaluation and acceptance criteria shall include, but is not limited to the following: [40 CFR §60.4880(a)(3)(ii)]
 - (1) If the Permittee has an operating limit that requires the use of a flow monitoring system, the Permittee shall meet the requirements in 40 CFR §60.4880(a)(3)(ii)(A)(1-4). [40 CFR §60.4880(a)(3)(ii)(A)]
 - (a) Install the flow sensor and other necessary equipment in a position that provides a representative flow. [40 CFR §60.4880(a)(3)(ii)(A)(1)]
 - (b) Use a flow sensor with a measurement sensitivity of no greater than 2% of the expected process flow rate. [40 CFR §60.4880(a)(3)(ii)(A)(2)]
 - (c) Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances. [40 CFR §60.4880(a)(3)(ii)(A)(3)]

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- (d) Conduct a flow monitoring system performance evaluation in accordance with the Permittee's monitoring plan at the time of each performance test but no less frequently than annually. [40 CFR §60.4880(a)(3)(ii)(A)(4)]
- ii. pH
 - (A) A monitoring device that continuously measures and records the scrubber liquid pH. The device shall be certified by the manufacturer to be accurate within $\pm 5\%$ over its operating range and shall be calibrated on an annual basis in accordance with the manufacturer's instructions.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4870(a); 40 CFR Part 60, Subpart LLLL, Table 3; 40 CFR Part 64]
 - (B) The Permittee shall monitor scrubber liquid pH using these minimum frequencies: [40 CFR §60.4870(d); 40 CFR Part 60, Subpart LLLL, Table 3]
 - (1) Data measurement: Continuous
 - (2) Data recording: Every 15 minutes-This recording time refers to the minimum frequency that the continuous monitor or other measuring device initially records data. For all data recorded every 15 minutes, the Permittee shall calculate hourly arithmetic averages. For all parameters, the Permittee shall use hourly averages to calculate 3-hour block average specified in 40 CFR Part 60, Subpart LLLL, Table 3 for demonstrating compliance.
 - (3) Data averaging period for compliance: 3-hour block
 - (C) For continuous parameter monitoring systems, the performance evaluation and acceptance criteria shall include, but is not limited to the following: [40 CFR §60.4880(a)(3)(ii)]
 - (1) If the Permittee has an operating limit that requires a pH monitoring system, the Permittee shall meet the requirements in 40 CFR §60.4880(a)(3)(ii)(C)(1-4). [40 CFR §60.4880(a)(3)(ii)(C)]
 - (a) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH. [40 CFR §60.4880(a)(3)(ii)(C)(1)]
 - (b) Ensure the sample is properly mixed and representative of the fluid to be measured. [40 CFR §60.4880(a)(3)(ii)(C)(2)]
 - (c) Conduct a performance evaluation of the pH monitoring system in accordance with the Permittee's monitoring plan at least once each process operating day. [40 CFR §60.4880(a)(3)(ii)(C)(3)]
 - (d) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within one of the pH of the operating limit) of the pH monitoring system in accordance with the Permittee's monitoring plan at the time of each performance test but no less frequently than quarterly. [40 CFR §60.4880(a)(3)(ii)(C)(4)]

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iii. Pressure Drop

- (A) The Permittee shall install, calibrate, maintain and operate a monitoring device (differential pressure transducer, differential pressure gauge or manometer) that continuously measures and records the VenturiPak scrubber gas flow pressure drop. This device shall be certified by the manufacturer to be accurate within ± 1 inch of water gauge and shall be calibrated on an annual basis in accordance with the manufacturer's instructions.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(b)(1); 40 CFR §60.4870(a); 40 CFR Part 60, Subpart LLLL, Table 3; 40 CFR Part 64]
- (B) The Permittee shall monitor pressure drop using these minimum frequencies:
[40 CFR §60.4870(b); 40 CFR Part 60, Subpart LLLL, Table 3]
 - (1) Data measurement: Continuous
 - (2) Data recording: Every 15 minutes-This recording time refers to the minimum frequency that the continuous monitor or other measuring device initially records data. For all data recorded every 15 minutes, the Permittee shall calculate hourly arithmetic averages. For all parameters, the Permittee shall use hourly averages to calculate 12-hour block average specified in 40 CFR Part 60, Subpart LLLL, Table 3 for demonstrating compliance.
 - (3) Data averaging period for compliance: 12-hour block
- (C) For continuous parameter monitoring systems, the performance evaluation and acceptance criteria shall include, but is not limited to the following: [40 CFR §60.4880(a)(3)(ii)]
 - (1) If the Permittee has an operating limit that requires the use of a pressure monitoring system, The Permittee shall meet the requirements in 40 CFR §60.4880(a)(3)(ii)(B)(1-6). [40 CFR §60.4880(a)(3)(ii)(B)]
 - (a) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.*, particulate matter scrubber pressure drop). [40 CFR §60.4880(a)(3)(ii)(B)(1)]
 - (b) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion. [40 CFR §60.4880(a)(3)(ii)(B)(2)]
 - (c) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1% of the pressure monitoring system operating range, whichever is less. [40 CFR §60.4880(a)(3)(ii)(B)(3)]
 - (d) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (*e.g.*, check for pressure tap pluggage daily). [40 CFR §60.4880(a)(3)(ii)(B)(4)]
 - (e) Conduct a performance evaluation of the pressure monitoring system in accordance with the Permittee's monitoring plan at the time of each performance test but no less frequently than annually. [40 CFR §60.4880(a)(3)(ii)(B)(5)]
 - (f) If at any time the measured pressure exceeds the manufacturer's specified

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maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with the Permittee's monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in the Permittee's monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.
[40 CFR §60.4880(a)(3)(ii)(B)(6)]

- iv. The Permittee shall install, operate, calibrate, and maintain the continuous parameter monitoring systems according to the requirements in paragraphs 40 CFR §§60.4905(a)(1) and (2).
[40 CFR §60.4905(a)]
 - (A) Meet the following general requirements for flow, pressure and pH measurement devices:
[40 CFR §60.4905(a)(1)]
 - (1) The Permittee shall collect data using the continuous monitoring system at all times the affected SSI unit is operating and at the intervals specified in 40 CFR §60.4905(a)(1)(ii), except for periods of monitoring system malfunctions that occur during periods specified in 40 CFR §60.4880(a)(7)(i), repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). Any such periods that the Permittee does not collect data using the continuous monitoring system constitute a deviation from the monitoring requirements and shall be reported in a deviation report.
[40 CFR §60.4905(a)(1)(i)]
 - (2) The Permittee shall collect continuous parameter monitoring system data in accordance with 40 CFR §60.13(e)(2). [40 CFR §60.4905(a)(1)(ii)]
 - (3) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities conducted during monitoring system malfunctions shall not be included in calculations used to report emissions or operating levels. Any such periods shall be reported in the annual deviation report. [40 CFR §60.4905(a)(1)(iii)]
 - (4) Any data collected during periods when the monitoring system is out of control as specified in 40 CFR §60.4880(a)(7)(i), repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or control activities conducted during out-of-control periods shall not be included in calculations used to report emissions or operating levels. Any such periods that do not coincide with a monitoring system malfunction, as defined in 40 CFR §60.4930, constitute a deviation from the monitoring requirements and shall be reported in a deviation report. [40 CFR §60.4905(a)(1)(iv)]
 - (5) The Permittee shall use all the data collected during all periods except those periods specified in 40 CFR §60.4905(a)(1)(iii) and 40 CFR §60.4905(a)(1)(iv) in assessing the operation of the control device and associated control system.
[40 CFR §60.4905(a)(1)(v)]
 - (B) Operate and maintain the continuous monitoring system according to the monitoring plan required under 40 CFR §60.4880. [40 CFR §60.4905(a)(2)]

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- v. The Permittee shall operate and maintain the continuous parameter monitoring systems specified in 40 CFR §60.4905(a) in continuous operation according to the monitoring plan required under 40 CFR §60.4880. [40 CFR §60.4905(c)]
- vi. The Permittee shall operate all monitoring devices using procedures that take into account manufacturer's specifications. [40 CFR Part 64]
- vii. If corrective action is necessary, the Permittee shall have maintenance respond within 24 hours to make adjustments/repairs. [40 CFR §64.3(b)(4)(iii)]

c. Record Keeping Requirements

i. Liquid/Water Flow Rate

- (A) The Permittee shall automatically and continuously record the scrubber tray water flow rate on a strip chart or digital data acquisition system at least once per 24 hour period. [40 CFR §64.3(b)(4)(iii)]
- (B) The Permittee shall maintain records of 1-hour averages. [40 CFR Part 60, Subpart LLLL, Table 3]

ii. pH

The Permittee shall maintain records of 1-hour averages. [40 CFR Part 60, Subpart LLLL, Table 3]

iii. Pressure Drop

- (A) The Permittee shall make and keep daily records of the measured pressure drop of the gas flow through the wet scrubbing device. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(c)(1)]
- (B) The Permittee shall maintain records of 1-hour averages. [40 CFR Part 60, Subpart LLLL, Table 3]
- (C) The Permittee shall automatically and continuously record the pressure differential across the scrubber on a strip chart or digital data acquisition system averaged over each one hour incinerator operating period. [40 CFR Part 64]

iv. The Permittee shall make and keep calibration and maintenance records and original instrument recordings for all continuous monitoring instruments and equipment. [Permit Nos. 075-0006, 075-0007 and 075-0008]

v. The Permittee shall record the results of each inspection, calibration, and validation check of the continuous parameter monitoring systems. [40 CFR §60.4905(a)(1)(vi)]

vi. Continuous monitoring data-The Permittee shall maintain the following records for a period of at least five years. All records shall be available on site in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator. Records of the following data: If a wet scrubber is used to comply with the rule, pressure drop across each wet scrubber system, liquid flow rate to each wet scrubber used to comply with the emission limit in 40 CFR Part 60, Subpart LLLL, Table 2 for particulate matter,

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cadmium, or lead, and scrubber liquid flow rate and scrubber liquid pH for each wet scrubber used to comply with an emission limit in 40 CFR Part 60, Subpart LLLL, Table 2 for sulfur dioxide or hydrogen chloride. [40 CFR §60.4910(f)(3)(i)(B)]

d. Reporting Requirements

The Permittee shall submit a written report to the commissioner and to EPA Region I for each semi-annual period ending June 30 and December 31 of each year. The semi-annual reports shall be submitted on or before March 1 and September 1 following the end of the semi-annual period. The report shall contain a record of the average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than 30% from the average pressure drop measured during the most recent performance test.

[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.155(a)(1)(i)]

7. Opacity

a. Limitation or Restriction

- i. The opacity shall be less than:

[Permit Nos. 075-0006, 075-0007 and 075-0008; RCSA §22a-174-4(c)(2); RCSA §22a-174-18(b)]

(A) 10% based on a six-minute block average; or

(B) 40% as measured by 40 CFR Part 60, Appendix A, reference method 9, reduced to a one-minute block average.

b. Monitoring Requirements

- i. The Permittee shall use Method 9 and the procedures in 40 CFR §60.11 to determine opacity every five years. [RCSA §22a-174-4(c)(2); 40 CFR §60.154(b)(6)]
- ii. The Permittee shall not cause or allow unburned waste or ash particulate emission that are individually discernible by the human eye measured using 40 CFR Part 60, Appendix A, Reference Method 9 and 40 CFR Part 60, Appendix A, Reference Method 22. [RCSA §22a-174-18(d)(3)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.A.7.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

8. PM/PM₁₀

a. Limitation or Restriction

- i. The Permittee shall not exceed the following PM/PM₁₀ limits:

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- (A) GEU-001: 0.4 lb/DT (Compliance Assurance Monitoring (CAM) limit)
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.152(a)(1); 40 CFR Part 64]
- (B) GEU-001: 60 mg/dscm @ 7% O₂
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4845; 40 CFR Part 60, Subpart LLLL, Table 2]
- (C) GEU-001: 4.21 TPY [Permit Nos. 075-0006, 075-0007 and 075-0008]
- (D) GEU-001: 0.08 grains per standard cubic foot corrected to 12% CO₂ over a two hour average or 0.18 grams per cubic meter corrected to 12% CO₂ over a two hour period (CAM limit)
[RCSA §22a-174-18(d)(2)(A); 40 CFR Part 64]
- (E) EU-001 and EU-002: 1.0 lb/hr [Permit Nos. 075-0006 and 075-0007]
- (F) EU-003: 1.00 lb/hr [Permit No. 075-0008]

b. Monitoring Requirements

- i. The Permittee shall stack test every five years to determine compliance with the particulate matter emission limit. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.152(a)(1)]
- ii. The Permittee shall submit a written intent-to-test (ITT) protocol for the Commissioner's review and written approval not less than 60 days prior to the emissions testing. The ITT submission shall comply with the Department of Energy and Environmental Protection (DEEP) Emission Test Guidelines and Form AE-404. [RCSA §22a-174-5(d)]
- iii. *Demonstrate continuous compliance using a performance test*-Except as provided in 40 CFR §60.4885(a)(3) and (e), following the date that the initial performance test for each pollutant in 40 CFR Part 60, Subpart LLLL, Table 2 except carbon monoxide is completed, the Permittee shall conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test shall be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in 40 CFR Part 60, Subpart LLLL, Table 2 and according to the testing, monitoring, and calibration requirements specified in 40 CFR §60.4900(a).
[40 CFR §60.4885(a); 40 CFR Part 60, Subpart LLLL, Table 2]
 - (A) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time. [40 CFR §60.4885(a)(1)]
 - (B) The Permittee shall repeat the performance test within 60 days of a process change, as defined in 40 CFR §60.4930. [40 CFR §60.4885(a)(2)]
 - (C) Except as specified in 40 CFR §60.4885(a)(1) and (2), the Permittee can conduct performance tests less often for a given pollutant (i.e. PM), as specified in 40 CFR §60.4885(a)(3)(i-iii).
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4885(a)(3)]
 - (1) The Permittee can conduct performance tests less often if their performance tests for the pollutant for at least two consecutive years show that the emissions are at or below 75%

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- of the emission limit specified in 40 CFR Part 60, Subpart LLLL, Table 2 or 3, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the Permittee does not have to conduct a performance test for that pollutant for the next two years. The Permittee shall conduct a performance test during the third year and no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(i)]
- (2) If the SSI unit continues to meet the emission limit for the pollutant, the Permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75% of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test shall be conducted no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(ii)]
 - (3) If a performance test shows emissions exceeded 75% of the emission limit for a pollutant, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance. [40 CFR §60.4885(a)(3)(iii)]
- iv. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Administrator in writing as specified in 40 CFR §60.4915(g). The Permittee shall conduct the performance test as soon as practicable after the force majeure event occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline, and will notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, the Permittee remains strictly subject to the requirements of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4885(e)]
 - v. The Permittee shall continuously monitor the operating parameters specified in 40 CFR §60.4890(a)(1) and (a)(2) using the continuous monitoring equipment and according to the procedures specified in 40 CFR §60.4905 or established in 40 CFR §60.4855. To determine compliance, the Permittee shall use the data averaging period specified in 40 CFR Part 60, Subpart LLLL, Table 3 unless a different averaging period is established under 40 CFR §60.4855. [40 CFR §60.4890(a); 40 CFR Part 60, Subpart LLLL, Table 3]
 - (A) The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR §60.4855 and 40 CFR §60.4870 and 40 CFR §60.4890(d) for each applicable operating parameter. [40 CFR §60.4890(a)(1)]
 - vi. The Permittee shall confirm their operating limits according to 40 CFR §60.4890(d)(1) or re-establish operating limits according to 40 CFR §60.4890(d)(2). The Permittee's operating limits shall be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the Permittee's operating requirements in the fugitive emissions monitoring plan specified in 40 CFR §60.4850(d). [40 CFR §60.4890(d)]
 - (A) The Permittee's operating limits shall be based on operating data recorded during any performance test required in 40 CFR §60.4885(a). [40 CFR §60.4890(d)(1)]
 - (B) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR §60.4890(d)(2)]

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c. Record Keeping Requirements

- i. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- iii. The Permittee shall make and keep daily records of the total solids and volatile solids content of the sludge charged to the incinerator.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(c)(3)]

d. Reporting Requirements

Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR §60.4890(a) constitutes a deviation from the operating limits established under 40 CFR Part 60, Subpart LLLL, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. The Permittee shall submit the deviation report specified in 40 CFR §60.4915(e) for each instance that the Permittee did not meet one of the operating limits established under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4890(b)]

9. SO_x

a. Limitation or Restriction

- i. The Permittee shall not exceed the following SO_x limits:
 - (A) GEU-001: 1.96 lb/DT [Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (B) GEU-001: 26 ppmv @ 7% O₂ (dry)
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4845; 40 CFR Part 60, Subpart LLLL, Table 2]
 - (C) EU-001 and EU-002: 4.9 lb/hr [Permit Nos. 075-0006 and 075-0007]
 - (D) EU-001 and EU-002: 20.6 TPY [Permit Nos. 075-0006 and 075-0007]
 - (E) EU-003: 4.90 lb/hr [Permit No. 075-0008]
 - (F) EU-003: 20.64 TPY [Permit No. 075-0008]

b. Monitoring Requirements

- i. The Permittee shall stack test every five years to determine compliance with the SO_x emission limit, expressed as SO₂. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall submit a written ITT protocol for the Commissioner's review and written approval not less than 60 days prior to the emissions testing. The ITT submission shall comply with the DEEP Emission Test Guidelines and Form AE-404. [RCSA §22a-174-5(d)]

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- iii. *Demonstrate continuous compliance using a performance test*—Except as provided in 40 CFR §60.4885(a)(3) and (e), following the date that the initial performance test for each pollutant in 40 CFR Part 60, Subpart LLLL, Table 2 except carbon monoxide is completed, the Permittee shall conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test shall be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in 40 CFR Part 60, Subpart LLLL, Table 2 and according to the testing, monitoring, and calibration requirements specified in 40 CFR §60.4900(a).
[40 CFR §60.4885(a); 40 CFR Part 60, Subpart LLLL, Table 2]
- (A) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time. [40 CFR §60.4885(a)(1)]
- (B) The Permittee shall repeat the performance test within 60 days of a process change, as defined in 40 CFR §60.4930. [40 CFR §60.4885(a)(2)]
- (C) Except as specified in 40 CFR §60.4885(a)(1) and (2), the Permittee can conduct performance tests less often for a given pollutant (i.e. SO_x), as specified in 40 CFR §60.4885(a)(3)(i-iii).
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4885(a)(3)]
- (1) The Permittee can conduct performance tests less often if their performance tests for the pollutant for at least two consecutive years show that the emissions are at or below 75% of the emission limit specified in 40 CFR Part 60, Subpart LLLL, Table 2 or 3, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the Permittee does not have to conduct a performance test for that pollutant for the next two years. The Permittee shall conduct a performance test during the third year and no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(i)]
- (2) If the SSI unit continues to meet the emission limit for the pollutant, the Permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75% of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test shall be conducted no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(ii)]
- (3) If a performance test shows emissions exceeded 75% of the emission limit for a pollutant, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance.
[40 CFR §60.4885(a)(3)(iii)]
- iv. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Administrator in writing as specified in 40 CFR §60.4915(g). The Permittee shall conduct the performance test as soon as practicable after the force majeure event occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline, and will notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, the Permittee remains strictly subject to the requirements of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4885(e)]

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- v. The Permittee shall continuously monitor the operating parameters specified in 40 CFR §60.4890(a)(1) and (a)(2) using the continuous monitoring equipment and according to the procedures specified in 40 CFR §60.4905 or established in 40 CFR §60.4855. To determine compliance, the Permittee shall use the data averaging period specified in 40 CFR Part 60, Subpart LLLL, Table 3 unless a different averaging period is established under 40 CFR §60.4855. [40 CFR §60.4890(a)]
 - (A) The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR §60.4855 and 40 CFR §60.4870 and 40 CFR §60.4890(d) for each applicable operating parameter. [40 CFR §60.4890(a)(1)]
- vi. The Permittee shall confirm their operating limits according to 40 CFR §60.4890(d)(1) or re-establish operating limits according to 40 CFR §60.4890(d)(2). The Permittee's operating limits shall be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the Permittee's operating requirements in the fugitive emissions monitoring plan specified in 40 CFR §60.4850(d). [40 CFR 60.4890(d)]
 - (A) The Permittee's operating limits shall be based on operating data recorded during any performance test required in 40 CFR §60.4885(a). [40 CFR §60.4890(d)(1)]
 - (B) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR §60.4890(d)(2)]

c. *Record Keeping Requirements*

- i. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required. [Permit Nos. 075-0006, 075-0007 and 075-0008]

d. *Reporting Requirements*

Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR §60.4890(a) constitutes a deviation from the operating limits established under 40 CFR Part 60, Subpart LLLL, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. The Permittee shall submit the deviation report specified in 40 CFR §60.4915(e) for each instance that the Permittee did not meet one of the operating limits established under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4890(b)]

10. NO_x

a. *Limitation or Restriction*

- i. The Permittee shall not exceed the following NO_x limits:
 - (A) GEU-001: 0.33 lb/MMBTU [Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (B) GEU-001: 7.24 lb/DT (CAM limit)

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[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR Part 64]

- (C) GEU-001: 210 ppmv @ 7% O₂ (dry)
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4845; 40 CFR Part 60, Subpart LLLL, Table 2]
- (D) EU-001 and EU-002: 18.1 lb/hr [Permit Nos. 075-0006 and 075-0007]
- (E) EU-001 and EU-002: 76.5 TPY [Permit Nos. 075-0006 and 075-0007]
- (F) EU-003: 18.10 lb/hr [Permit No. 075-0008]
- (G) EU-003: 76.24 TPY [Permit No. 075-0008]

b. Monitoring Requirements

- i. The Permittee shall stack test every five years to determine compliance with the NO_x emission limit, expressed as NO₂. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall submit a written ITT protocol for the Commissioner's review and written approval not less than 60 days prior to the emissions testing. The ITT submission shall comply with the DEEP Emission Test Guidelines and Form AE-404. [RCSA §22a-174-5(d)]
- iii. *Demonstrate continuous compliance using a performance test*-Except as provided in 40 CFR §60.4885(a)(3) and (e), following the date that the initial performance test for each pollutant in 40 CFR Part 60, Subpart LLLL, Table 2 except carbon monoxide is completed, the Permittee shall conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test shall be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in 40 CFR Part 60, Subpart LLLL, Table 2 and according to the testing, monitoring, and calibration requirements specified in 40 CFR §60.4900(a). [40 CFR §60.4885(a); 40 CFR Part 60, Subpart LLLL, Table 2]
 - (A) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time. [40 CFR §60.4885(a)(1)]
 - (B) The Permittee shall repeat the performance test within 60 days of a process change, as defined in 40 CFR §60.4930. [40 CFR §60.4885(a)(2)]
 - (C) Except as specified in 40 CFR §60.4885(a)(1) and (2), the Permittee can conduct performance tests less often for a given pollutant (i.e. NO_x), as specified in 40 CFR §60.4885(a)(3)(i-iii).
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4885(a)(3)]
 - (1) The Permittee can conduct performance tests less often if their performance tests for the pollutant for at least two consecutive years show that the emissions are at or below 75% of the emission limit specified in 40 CFR Part 60, Subpart LLLL, Table 2 or 3, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the Permittee does not have to conduct a performance test for that pollutant for the next two years. The Permittee shall

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conduct a performance test during the third year and no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(i)]

- (2) If the SSI unit continues to meet the emission limit for the pollutant, the Permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75% of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test shall be conducted no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(ii)]
 - (3) If a performance test shows emissions exceeded 75% of the emission limit for a pollutant, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance. [40 CFR §60.4885(a)(3)(iii)]
- iv. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Administrator in writing as specified in 40 CFR §60.4915(g). The Permittee shall conduct the performance test as soon as practicable after the force majeure event occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline, and will notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, the Permittee remains strictly subject to the requirements of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4885(e)]
- v. The Permittee shall continuously monitor the operating parameters specified in 40 CFR §60.4890(a)(1) and (a)(2) using the continuous monitoring equipment and according to the procedures specified in 40 CFR §60.4905 or established in 40 CFR §60.4855. To determine compliance, the Permittee shall use the data averaging period specified in 40 CFR Part 60, Subpart LLLL, Table 3 unless a different averaging period is established under 40 CFR §60.4855. [40 CFR §60.4890(a); 40 CFR Part 60, Subpart LLLL, Table 3]
 - (A) The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR §60.4855 and 40 CFR §60.4870 and 40 CFR §60.4890(d) for each applicable operating parameter. [40 CFR §60.4890(a)(1)]
- vi. The Permittee shall confirm their operating limits according to 40 CFR §60.4890(d)(1) or re-establish operating limits according to 40 CFR §60.4890(d)(2). The Permittee's operating limits shall be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the Permittee's operating requirements in the fugitive emissions monitoring plan specified in 40 CFR §60.4850(d). [40 CFR 60.4890(d)]
 - (A) The Permittee's operating limits shall be based on operating data recorded during any performance test required in 40 CFR §60.4885(a). [40 CFR §60.4890(d)(1)]
 - (B) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR §60.4890(d)(2)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]

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- ii. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required.
[Permit Nos. 075-0006, 075-0007 and 075-0008]

d. Reporting Requirements

- i. 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. [RCSA §22a-174-33(j)(1)(X); 40 CFR Part 64]
- ii. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR §60.4890(a) constitutes a deviation from the operating limits established under 40 CFR Part 60, Subpart LLLL, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. The Permittee shall submit the deviation report specified in 40 CFR §60.4915(e) for each instance that the Permittee did not meet one of the operating limits established under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4890(b)]

11. VOC

a. Limitation or Restriction

- i. The Permittee shall not exceed the following VOC limits:
 - (A) GEU-001: 50 ppmv @7% O₂ (dry, based on monthly average)
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §503.40(c)(2)]
 - (B) EU-001 and EU-002: 19.4 lb/hr [Permit Nos. 075-0006 and 075-0007]
 - (C) EU-001 and EU-002: 82.0 TPY [Permit Nos. 075-0006 and 075-0007]
 - (D) EU-003: 7.80 lb/hr [Permit No. 075-0008]
 - (E) EU-003: 32.85 TPY [Permit No. 075-0008]

b. Monitoring Requirements

- i. The Permittee shall stack test every five years to determine compliance with the VOC emission limit. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall submit a written ITT protocol for the Commissioner's review and written approval not less than 60 days prior to the emissions testing. The ITT submission shall comply with the DEEP Emission Test Guidelines and Form AE-404. [RCSA §22a-174-5(d)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required.
[Permit Nos. 075-0006, 075-0007 and 075-0008]

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d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

12. CO

a. Limitation or Restriction

i. The Permittee shall not exceed the following CO limits:

- (A) GEU-001: 100 ppmv @ 7% O₂ (dry, based on monthly average)
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §503.40(c)(2)]
- (B) GEU-001: 52 ppmv @ 7% O₂ (dry, based on 24-hour block average (using one hour averages of data))
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4845; 40 CFR Part 60, Subpart LLLL, Table 2]
- (C) EU-001 and EU-002: 62.2 lb/hr [Permit Nos. 075-0006 and 075-0007]
- (D) EU-001 and EU-002: 262.0 TPY [Permit Nos. 075-0006 and 075-0007]
- (E) EU-003: 24.33 lb/hr [Permit No. 075-0008]
- (F) EU-003: 102.48 TPY [Permit No. 075-0008]

b. Monitoring Requirements

- i. The Permittee shall stack test every five years to determine compliance with the CO emission limit.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall submit a written ITT protocol for the Commissioner's review and written approval not less than 60 days prior to the emissions testing. The ITT submission shall comply with the DEEP Emission Test Guidelines and Form AE-404. [RCSA §22a-174-5(d)]
- iii. The Permittee shall install, maintain and operate a monitoring device that continuously measures and records the carbon monoxide (CO) concentration of the incinerator exhaust gas.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §503.40(c)(1)]
- iv. To demonstrate continuous compliance with the carbon monoxide emission limit, the Permittee shall use the carbon monoxide continuous emissions monitoring system specified in 40 CFR §60.4900(b). For determining compliance with the carbon monoxide concentration limit using carbon monoxide CEMS, the correction to 7% oxygen does not apply during periods of startup or shutdown. Use the measured carbon monoxide concentration without correcting for oxygen concentration in averaging with other carbon monoxide concentrations (corrected to 7% oxygen) to determine the 24-hour average value. [40 CFR §60.4885(b)(1)]
- v. The Permittee shall use the continuous emissions monitoring system and follow the requirements specified in 40 CFR §60.4900(b). The Permittee shall measure emissions according to 40 CFR

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§60.13 to calculate 1-hour arithmetic averages, corrected to 7% oxygen (or carbon dioxide). The Permittee shall demonstrate initial compliance using a 24-hour block average of these 1-hour arithmetic average emission concentrations, calculated using Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR Part 60, Appendix A-7. [40 CFR §60.4885(b)(3)]

- vi. *Continuous monitor requirements*-The Permittee shall meet the following requirements, as applicable, when using a continuous monitoring system to demonstrate compliance with the emission limits in 40 CFR Part 60, Subpart LLLL, Table 2. [40 CFR §60.4900(b); 40 CFR Part 60, Subpart LLLL, Table 2]
 - (A) The Permittee shall install, operate, calibrate, and maintain an instrument for continuously measuring and recording the emissions to the atmosphere in accordance with the following: [40 CFR §60.4900(b)(3)]
 - (1) 40 CFR §60.13. [40 CFR §60.4900(b)(3)(i)]
 - (2) The following performance specifications of 40 CFR Part 60, Appendix B, as applicable: For carbon monoxide, 40 CFR Part 60, Appendix B, Performance Specification 4B with the modifications shown in 40 CFR Part 60, Subpart LLLL, Table 2. [40 CFR §60.4900(b)(3)(ii)(C)]
 - (3) For continuous emissions monitoring systems, the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of 40 CFR Part 60, Appendix F specified in 40 CFR §§60.4900(b)(3)(iii)(A-G). For each pollutant, the span value of the continuous emissions monitoring system is two times the applicable emission limit, expressed as a concentration. For carbon monoxide, 40 CFR Part 60, Appendix F, Procedure 1. [40 CFR §60.4900(b)(3)(iii)(C)]
 - (4) If the monitoring system has a malfunction or out-of-control period, the Permittee shall complete repairs and resume operation of the monitoring system as expeditiously as possible. [40 CFR §60.4900(b)(3)(iv)]
 - (B) During each relative accuracy test run of the continuous emissions monitoring system using the performance specifications in 40 CFR §60.4900(b)(3)(ii), emission data for each regulated pollutant and oxygen shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emissions monitoring systems and the test methods specified in 40 CFR §60.4900(b)(4)(i-viii). Relative accuracy testing shall be at representative operating conditions while the SSI unit is charging sewage sludge. For carbon monoxide, Method 10, 10A, or 10B at 40 CFR Part 60, Appendix A-4, shall be used. [40 CFR §60.4900(b)(4)(iii)]
- c. *Record Keeping Requirements*
 - i. The Permittee shall make and keep calibration and maintenance records and original instrument recordings for all continuous monitoring instruments and equipment. [Permit No. 075-0006, 075-0007 and 075-0008]
 - ii. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]
 - iii. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required.

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[Permit Nos. 075-0006, 075-0007 and 075-0008]

- iv. The Permittee shall make and keep the following information for five years:
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §503.40(c)(3)(i) and (ii)]
 - (A) The CO concentrations in the exit gas; and
 - (B) A calibration and maintenance log for the instrument used to measure the CO concentration.
- v. *Continuous monitoring data*-The Permittee shall maintain the following records for a period of at least five years. All records shall be available on site in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator. Records of the following data: For CO continuous emissions monitoring systems, all 1-hour average concentrations. [40 CFR §60.4910(f)(1)]

d. Reporting Requirements

- i. The Permittee shall submit the monthly average CO concentrations in the exit gas to the permitting authority on February 19 of each year.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §503.40(c)(4)]
- ii. The Permittee shall notify the Administrator one month before starting use of the continuous monitoring system. [40 CFR §60.4900(b)(1)]
- iii. The Permittee shall notify the Administrator one month before stopping use of the continuous monitoring system, in which case the Permittee shall also conduct a performance test prior to ceasing operation of the system. [40 CFR §60.4900(b)(2)]

13. HAP

a. Limitation or Restriction

- i. This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any applicable HAP emitted and listed in RCSA §22a-174-29. [STATE ONLY REQUIREMENT] [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall not exceed the following limits:
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4845; 40 CFR Part 60, Subpart LLLL, Table 2]
 - (A) Lead (Pb): 0.0035 mg /dscm @ 7% O₂ (dry)
 - (B) Cadmium (Cd): 0.0024 mg /dscm @ 7% O₂ (dry)
 - (C) Hydrogen Chloride (HCl): 1.2 ppmvd @ 7% O₂ (dry)
 - (D) The Permittee has the option to comply with either the dioxin/furan emission limit on a total mass basis or the dioxin/furan emission limit on a toxic equivalency basis:
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR Part 60, Subpart LLLL, Table 2]
 - (1) Dioxins/furans (total mass basis): 0.045 ng /dscm @ 7% O₂ (dry) or

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(2) Dioxins/furans (total equivalency basis): 0.0022 ng /dscm @ 7% O₂ (dry)

b. Monitoring Requirements

i. A GC/MS of VOC sample is required for the following pollutants to determine compliance with the requirements of RCSA §22a-174-29, the HAP section of the RCSA:
[Permit Nos. 075-0006, 075-0007 and 075-0008]

- (A) Acrylonitrile
- (B) Benzene
- (C) Carbon Tetrachloride
- (D) Chlorobenzene
- (E) Chloroform
- (F) Di (2-Ethyl Hexyl) Phthalate
- (G) 1, 2-Dichlorobenzene
- (H) Ethylbenzene
- (I) Ethylene Dichloride
- (J) Methylene Chloride
- (K) Perchloroethylene
- (L) Phenol
- (M) Toluene
- (N) 1,1,1-Trichloroethane
- (O) Trichloroethylene
- (P) Polychlorinated Biphenyls

ii. Testing for the following additional metals is required every five years to determine compliance with the requirements of RCSA §22a-174-29, the HAP section of the RCSA:
[Permit Nos. 075-0006, 075-0007 and 075-0008]

- (A) Arsenic (As)
- (B) Cadmium (Cd)
- (C) Chromium (Cr)

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- (D) Copper (Cu)
 - (E) Lead (Pb)
 - (F) Manganese (Mn)
 - (G) Nickel (Ni)
 - (H) Selenium (Se)
 - (I) Zinc (Zn)
- iii. Lead emissions shall not cause, or significantly contribute to a violation of the NAAQS.
[RCSA §22a-174-3a(i)]
- iv. To demonstrate compliance with the dioxins/furans toxic equivalency emission limit in 40 CFR §60.4885(a), the Permittee shall determine dioxins/furans toxic equivalency as follows:
[40 CFR §60.4885(c)]
- (A) Measure the concentration of each dioxin/furan tetra- through octa-chlorinated isomer emitted using EPA Method 23. [40 CFR §60.4885(c)(1)]
 - (B) For each dioxin/furan (tetra- through octa-chlorinated) isomer measured in accordance with 40 CFR §60.4885(c)(1), multiply the isomer concentration by its corresponding toxic equivalency factor specified in 40 CFR Part 60, Subpart LLLL, Table 4.
[40 CFR §60.4885(c)(2)]
 - (C) Sum the products calculated in accordance with 40 CFR §60.4885(c)(2) to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.
[40 CFR §60.4885(c)(3)]
- v. *Demonstrate continuous compliance using a performance test*-Except as provided in 40 CFR §60.4885(a)(3) and (e), following the date that the initial performance test for each pollutant in 40 CFR Part 60, Subpart LLLL, Table 2 except carbon monoxide is completed, the Permittee shall conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test shall be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in 40 CFR Part 60, Subpart LLLL, Table 2 and according to the testing, monitoring, and calibration requirements specified in 40 CFR §60.4900(a).
[40 CFR §60.4885(a); 40 CFR Part 60, Subpart LLLL, Table 2]
- (A) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time. [40 CFR §60.4885(a)(1)]
 - (B) The Permittee shall repeat the performance test within 60 days of a process change, as defined in 40 CFR §60.4930. [40 CFR §60.4885(a)(2)]
 - (C) Except as specified in 40 CFR §60.4885(a)(1) and (2), the Permittee can conduct performance tests less often for a given pollutant (i.e. HCl, Dioxins/Furans, Cd and Pb), as specified in 40 CFR §60.4885(a)(3)(i-iii).

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[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4885(a)(3)]

- (1) The Permittee can conduct performance tests less often if their performance tests for the pollutant for at least two consecutive years show that the emissions are at or below 75% of the emission limit specified in 40 CFR Part 60, Subpart LLLL, Table 2 or 3, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the Permittee does not have to conduct a performance test for that pollutant for the next two years. The Permittee shall conduct a performance test during the third year and no more than 37 months after the previous performance test.
[40 CFR §60.4885(a)(3)(i)]
 - (2) If the SSI unit continues to meet the emission limit for the pollutant, the Permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75% of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test shall be conducted no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(ii)]
 - (3) If a performance test shows emissions exceeded 75% of the emission limit for a pollutant, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance.
[40 CFR §60.4885(a)(3)(iii)]
- vi. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Administrator in writing as specified in 40 CFR §60.4915(g). The Permittee shall conduct the performance test as soon as practicable after the force majeure event occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline, and will notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, the Permittee remains strictly subject to the requirements of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4885(e)]
- vii. The Permittee shall continuously monitor the operating parameters specified in 40 CFR §60.4890(a)(1) and (a)(2) using the continuous monitoring equipment and according to the procedures specified in 40 CFR §60.4905 or established in 40 CFR §60.4855. To determine compliance, the Permittee shall use the data averaging period specified in 40 CFR Part 60, Subpart LLLL, Table 3 unless a different averaging period is established under 40 CFR §60.4855.
[40 CFR §60.4890(a)]
- (A) The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR §60.4855 and 40 CFR §60.4870 and 40 CFR §60.4890(d) for each applicable operating parameter. [40 CFR §60.4890(a)(1)]
- viii. The Permittee shall confirm their operating limits according to 40 CFR §60.4890(d)(1) or re-establish operating limits according to 40 CFR §60.4890(d)(2). The Permittee's operating limits shall be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the Permittee's operating requirements in the fugitive emissions monitoring plan specified in 40 CFR §60.4850(d). [40 CFR 60.4890(d)]
- (A) The Permittee's operating limits shall be based on operating data recorded during any

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performance test required in 40 CFR §60.4885(a). [40 CFR §60.4890(d)(1)]

- (B) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward.
[40 CFR §60.4890(d)(2)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of all compounds used, Material Safety Data Sheets (MSDS) or the manufacturer's technical data sheets. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall make and keep records of both MASC and actual stack concentration (ASC) calculations in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for each HAP emitted.
[RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iv. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- v. The Permittee shall make and keep records of the concentration of Lead, Arsenic, Cadmium, Chromium, and Nickel in the sewage sludge fed to the incinerator. [40 CFR §503.47(b)]
- vi. The Permittee shall make and keep a record of the dispersion factor for the site where the sewage sludge incinerator is located. [40 CFR §503.47(k)]
- vii. The Permittee shall make and keep a record of the risk specific concentration for chromium calculated using equation (6) in 40 CFR §503.43(d)(3). [40 CFR §503.47(m)]

d. Reporting Requirements

Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR §60.4890(a) constitutes a deviation from the operating limits established under 40 CFR Part 60, Subpart LLLL, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. The Permittee shall submit the deviation report specified in 40 CFR §60.4915(e) for each instance that the Permittee did not meet one of the operating limits established under 40 CFR Part 60, Subpart LLLL.
[40 CFR §60.4890(b)]

14. Beryllium (Be)

a. Limitation or Restriction

The Permittee shall not exceed the beryllium limit of 0.022 pounds (10 grams) over a 24-hour period.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §61.32(a)]

b. Monitoring Requirements

- i. Stack testing is required every five years to determine compliance with the beryllium emission limit. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §61.33(a)]

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- ii. The burning of beryllium and/or beryllium-containing waste, except propellants, is prohibited except in incinerators, emissions from which shall comply with the standard. [40 CFR §61.32(c)]

c. *Record Keeping Requirements*

- i. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall make and keep records of emission test results and other data needed to determine total emissions. Such records shall be retained at the source and made available, for inspection by the Administrator. [40 CFR §61.33(e)]

d. *Reporting Requirements*

All samples shall be analyzed and beryllium emissions shall be determined within 30 days after the source test. All determinations shall be reported to the Administrator before the close of the next business day following such determination. [40 CFR §61.33(d)]

15. Mercury (Hg)

a. *Limitation or Restriction*

- i. The Permittee shall not exceed the following mercury limits:
 - (A) 7.055 pounds (3,200 grams) over a 24-hour period.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §61.52(b)]
 - (B) 0.15 mg/dscm @ 7%O₂ (dry)
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4845; 40 CFR Part 60, Subpart LLLL, Table 2]

b. *Monitoring Requirements*

- i. Stack testing is required every five years to determine compliance with the mercury emission limit. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §61.53(d)]
- ii. The Permittee shall demonstrate compliance with the emission standard by testing emissions per 40 CFR §61.53(d) or by sludge sampling per 40 CFR §61.54. [40 CFR §61.53(d); 40 CFR §61.54]
- iii. *Demonstrate continuous compliance using a performance test*-Except as provided in 40 CFR §60.4885(a)(3) and (e), following the date that the initial performance test for each pollutant in 40 CFR Part 60, Subpart LLLL, Table 2 except carbon monoxide is completed, the Permittee shall conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test shall be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in 40 CFR Part 60, Subpart LLLL, Table 2 and according to the testing, monitoring, and calibration requirements specified in 40 CFR §60.4900(a).

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[40 CFR §60.4885(a); 40 CFR Part 60, Subpart LLLL, Table 2]

- (A) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time. [40 CFR §60.4885(a)(1)]
- (B) The Permittee shall repeat the performance test within 60 days of a process change, as defined in 40 CFR §60.4930. [40 CFR §60.4885(a)(2)]
- (C) Except as specified in 40 CFR §60.4885(a)(1) and (2), the Permittee can conduct performance tests less often for a given pollutant (i.e. Hg), as specified in 40 CFR §60.4885(a)(3)(i-iii).
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4885(a)(3)]
 - (1) The Permittee can conduct performance tests less often if their performance tests for the pollutant for at least two consecutive years show that the emissions are at or below 75% of the emission limit specified in 40 CFR Part 60, Subpart LLLL, Table 2 or 3, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the Permittee does not have to conduct a performance test for that pollutant for the next two years. The Permittee shall conduct a performance test during the third year and no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(i)]
 - (2) If the SSI unit continues to meet the emission limit for the pollutant, the Permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75% of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test shall be conducted no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(ii)]
 - (3) If a performance test shows emissions exceeded 75% of the emission limit for a pollutant, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance.
[40 CFR §60.4885(a)(3)(iii)]
- iv. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Administrator in writing as specified in 40 CFR §60.4915(g). The Permittee shall conduct the performance test as soon as practicable after the force majeure event occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline, and will notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, the Permittee remains strictly subject to the requirements of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4885(e)]
- v. The Permittee shall continuously monitor the operating parameters specified in 40 CFR §60.4890(a)(1) and (a)(2) using the continuous monitoring equipment and according to the procedures specified in 40 CFR §60.4905 or established in 40 CFR §60.4855. To determine compliance, the Permittee shall use the data averaging period specified in 40 CFR Part 60, Subpart LLLL, Table 3 unless a different averaging period is established under 40 CFR §60.4855.
[40 CFR §60.4890(a); 40 CFR Part 60, Subpart LLLL, Table 3]

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- (A) The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR §60.4855 and 40 CFR §60.4870 and 40 CFR §60.4890(d) for each applicable operating parameter. [40 CFR §60.4890(a)(1)]
- vi. The Permittee shall confirm their operating limits according to 40 CFR §60.4890(d)(1) or re-establish operating limits according to 40 CFR §60.4890(d)(2). The Permittee's operating limits shall be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the Permittee's operating requirements in the fugitive emissions monitoring plan specified in 40 CFR §60.4850(d). [40 CFR 60.4890(d)]
 - (A) The Permittee's operating limits shall be based on operating data recorded during any performance test required in 40 CFR §60.4885(a). [40 CFR §60.4890(d)(1)]
 - (B) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR §60.4890(d)(2)]

c. Record Keeping Requirements

- i. The Permittee shall demonstrate stack test emission results are in compliance with permit limitations for each pollutant for which stack testing is required. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall make and keep stack test records. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall make and keep records of emission test results and other data needed to determine total emissions. Such records shall be retained at the source and made available, for inspection by the Administrator. [40 CFR §61.53(d)(6)]

d. Reporting Requirements

- i. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR §60.4890(a) constitutes a deviation from the operating limits established under 40 CFR Part 60, Subpart LLLL, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. The Permittee shall submit the deviation report specified in 40 CFR §60.4915(e) for each instance that the Permittee did not meet one of the operating limits established under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4890(b)]
- ii. All samples shall be analyzed and mercury emissions shall be determined within 30 days after the stack test. Each determination shall be reported to the Administrator within 15 calendar days following the date such determination is completed. [40 CFR §61.53(d)(5)]

16. Operation and Maintenance Requirements

a. Limitation or Restriction

- i. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants. [Permit Nos. 075-0006, 075-0007 and 075-0008]

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- iii. The Permittee shall minimize dilution air during startup.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- iv. The Permittee shall minimize dilution air during operation.
[Permit Nos. 075-0006, 075-0007 and 075-0008]

b. Monitoring Requirements

- i. During Startup the Permittee shall:
 - (A) Verify that the emergency bypass stack damper linkage to insure the damper is in the closed position. [Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (B) Verify operation of the ash outlet drop damper to insure it is in the closed position, yet operates freely to allow ash to drop through.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (C) Verify operation of the ambient air inlet damper. The damper shall be in the closed position for startup. [Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (D) Visually inspect center shaft plugs, arms, sockets and flanges for cracks or damage that would allow center shaft air to escape into the incinerator.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (E) Inspect hearth access door seals and close doors tightly. Close all inspection ports.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (F) Place the center shaft return air damper in the closed position.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (G) Inspect ductwork and incinerator shell for air inleakage.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- ii. During Operation the Permittee shall:
 - (A) Open the ambient air inlet damper only as needed to provide continuous combustion. Continue to monitor combustion oxygen (O₂) and regulate the damper to minimize excess air.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (B) Operate the center shaft cooling air fan to maintain shaft cooling. Open the center shaft return air damper as needed. Continue to monitor combustion temperature and regulate the damper to minimize excess air. The hearth combustion temperature shall not exceed the permit limits.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (C) If the incinerator hearth access doors are opened to remove slag clinkers, close them tightly immediately afterward. Minimize the time the inspection ports are opened, and close them tightly afterward. [Permit Nos. 075-0006, 075-0007 and 075-0008]
 - (D) The FGR fan shall have a desired operating temperature of 300 to 1200°F and shall not exceed the maximum operating temperature of 1300°F. The FGR cooling fan shall be

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operated as needed to obtain the desired FGR fan operating temperature. The FGR cooling fan damper shall be opened in increments while maintaining the desired operating temperature of the FGR fan. [Permit Nos. 075-0006, 075-0007 and 075-0008]

- (E) Verify operation of the ash outlet drop damper to insure it is operating freely to allow the ash to discharge and then close between discharges.
[Permit Nos. 075-0006, 075-0007 and 075-0008]
- iii. The Permittee shall conduct an annual inspection of each air pollution control device used to comply with the emission limits, according to 40 CFR §60.4900(c), no later than 12 months following the previous annual air pollution control device inspection. [40 CFR §60.4895(a)]
- iv. Within 10 operating days following an air pollution control device inspection, all necessary repairs shall be completed unless the Permittee obtains written approval from the Administrator establishing a date whereby all necessary repairs of the affected SSI unit shall be completed. [40 CFR §60.4895(b)]
- v. *Air pollution control device inspections*-The Permittee shall conduct air pollution control device inspections that include, at a minimum, the following: [40 CFR §60.4900(c)]
 - (A) Inspect air pollution control device(s) for proper operation. [40 CFR §60.4900(c)(1)]
 - (B) Generally observe that the equipment is maintained in good operating condition.
[40 CFR §60.4900(c)(2)]
 - (C) Develop a site-specific monitoring plan according to the requirements in 40 CFR §60.4880. This requirement also applies to the Permittee if they petition the EPA Administrator for alternative monitoring parameters under 40 CFR §60.13(i). [40 CFR §60.4900(c)(3)]

c. *Record Keeping Requirements*

- i. The Permittee shall maintain the items (as applicable) specified in 40 CFR §§60.4910 (a-n) for a period of at least five years. All records shall be available on site in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator: [40 CFR §60.4910]
 - (A) *Air pollution control device inspections*-The Permittee shall make and keep records of the results of annual air pollution control device inspections conducted as specified in 40 CFR §60.4875 and 40 CFR §60.4900(c), including any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the Administrator. [40 CFR §60.4910(d)]
 - (B) *Equipment specifications and related operation and maintenance requirements*-Equipment specifications and related operation and maintenance requirements received from vendors for the incinerator, emission controls, and monitoring equipment. [40 CFR §60.4910(i)]
 - (C) *Inspections, calibrations, and validations checks of monitoring devices*-Records of inspections, calibrations, and validations checks of any monitoring devices as required under 40 CFR §60.4900 and 40 CFR §60.4905. [40 CFR §60.4910(j)]

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d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

17. Flue Gas Oxygen (O₂) Concentration

a. Limitation or Restriction

Not Applicable

b. Monitoring Requirements

- i. The Permittee shall install, maintain and operate a monitoring device that continuously measures and records the oxygen content (wet) of the incinerator exhaust gas. The oxygen monitoring device shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range and shall be calibrated in accordance with the manufacturer's instructions at least once each 24-hour period. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(b)(2); 40 CFR §503.45(b)]
- ii. The Permittee shall install, maintain and operate a monitoring device that continuously measures and records the information used to determine the moisture content in the sewage sludge incinerator exhaust gas. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(b)(2); 40 CFR §503.45(c)]
- iii. The Permittee shall determine annually the coefficient of correlation between the hearth No.3 exhaust gas dry O₂ concentration and stack gas dry O₂ concentration in accordance with EPA and DEEP approved procedures. If the minimum coefficient of correlation is less than 0.8, the Permittee shall immediately implement corrective measures to further reduce dilution air infiltration into the exhaust gas stream, and shall retest until the coefficient of correlation is 0.8 or greater. [Permit Nos. 075-0006, 075-0007 and 075-0008; EPA's letter to MDC dated May 27, 2008; 40 CFR §60.153(b)(2); 40 CFR §503.45(b)]
- iv. The Permittee shall operate and maintain the stack O₂ CEMS consistent with the applicable provisions of 40 CFR Part 60, Subparts B and F and DEEP CEMS guidelines. [Permit Nos. 075-0006, 075-0007 and 075-0008; EPA's letter to MDC dated May 27, 2008; 40 CFR §60.153(b)(2)]
- v. The Permittee shall maintain the availability of CEM data from the O₂ analyzers, for no less than 90% of the total operating hours of the source in any calendar quarter. Data availability shall be calculated using the equation in RCSA §22a-174-4(c)(5)(A)(iv). [RCSA §22a-174-4(c)(5)(A)(iii)]
- vi. *Performance testing requirements*-Method 3A or 3B at 40 CFR Part 60, Appendix A-2 shall be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B at 40 CFR Part 60, Appendix A-2 shall be used simultaneously with each method. [40 CFR §60.4900(a)(5)]
- vii. During each relative accuracy test run of the continuous emissions monitoring system using the performance specifications in 40 CFR §60.4900(b)(3)(ii), emission data for each regulated pollutant

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and oxygen shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emissions monitoring systems and the test methods specified in 40 CFR §60.4900(b)(4)(i-viii). Relative accuracy testing shall be at representative operating conditions while the SSI unit is charging sewage sludge. For oxygen, Method 3A or 3B at 40 CFR Part 60, Appendix A-2, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, see 40 CFR §60.17), as applicable, shall be used.
[40 CFR §60.4900(b)(4)(viii)]

- viii. The Permittee shall calibrate, maintain and operate oxygen monitors using procedures that take into account manufacturer's specifications. [40 CFR Part 64]
- ix. The Permittee shall calibrate, maintain and operate flue gas recirculation (FGR) damper switch or variable frequency drive (VFD) fan or FGR ductwork (air flow rate) using procedures that take into account manufacturer's specifications. [40 CFR Part 64]

c. Record Keeping Requirements

- i. The Permittee shall make and keep a calibration and maintenance log for the instruments used to measure the oxygen concentration in the exit gas from the sewage sludge incinerator stack, the information needed to determine moisture content in the exit gas, and the combustion temperatures. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(c)(2) and (3); 40 CFR §503.47(n)]
- ii. The Permittee shall make and keep daily records of the measured oxygen content of the incinerator exhaust gas. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.153(c)(2)]
- iii. The Permittee shall automatically and continuously record the flue gas oxygen concentration on a strip chart or digital data acquisition system averaged over each 1-hour incinerator operating period. [40 CFR Part 64]
- iv. The Permittee shall make and keep daily records of the oxygen concentration and information used to measure moisture content from the sewage sludge incinerator stack. [40 CFR §503.47(h)]

d. Reporting Requirements

- i. The Permittee shall submit a written report to the commissioner and to EPA Region I for each semi-annual period ending June 30 and December 31 of each year. The semi-annual reports shall be submitted on or before March 1 and September 1 following the end of the semi-annual period. The report shall contain a record of the average oxygen content in the incinerator exhaust for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than three percent. [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.155(a)(2)]
- ii. The Permittee shall submit annually the correlation report, at the same time as the Title V permit compliance certification is due, to EPA and the DEEP. Failure to submit accurate, complete, and timely correlation reports may be cause for EPA and/or the DEEP to require oxygen monitoring as stipulated in 40 CFR §60.153(b)(2).
[Permit Nos. 075-0006, 075-0007 and 075-0008; EPA's letter to MDC dated May 27, 2008 and 40 CFR §60.153(b)(2)]

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18. Operator Training

a. Limitation or Restriction

- i. A SSI unit cannot be operated unless a fully trained and qualified SSI unit operator is accessible, either at the facility or can be at the facility within one hour. The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily not accessible, the Permittee shall follow the procedures in 40 CFR §60.4835. [40 CFR §60.4810(a)]
- ii. Operator training and qualification shall be obtained through a state-approved program or by completing the requirements included in 40 CFR §60.4810(c). [40 CFR §60.4810(b); 40 CFR §60.4820(a)]
- iii. Training shall be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in 40 CFR §60.4810(c)(1-3). [40 CFR §60.4810(c)]

(A) Training on the ten subjects listed below: [40 CFR §60.4810(c)(1)]

- (1) Environmental concerns, including types of emissions.
- (2) Basic combustion principles, including products of combustion.
- (3) Operation of the specific type of incinerator to be used by the operator, including proper startup, sewage sludge feeding, and shutdown procedures.
- (4) Combustion controls and monitoring.
- (5) Operation of air pollution control equipment and factors affecting performance (if applicable).
- (6) Inspection and maintenance of the incinerator and air pollution control devices.
- (7) Actions to prevent malfunctions or to prevent conditions that may lead to malfunctions.
- (8) Bottom and fly ash characteristics and handling procedures.
- (9) Applicable Federal, State, and local regulations, including Occupational Safety and Health Administration workplace standards.
- (10) Pollution prevention.

(B) An examination designed and administered by the state-approved program. Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under 40 CFR §60.4810(c)(2). [40 CFR §60.4810(c)(2); 40 CFR §60.4820(b)]

(C) Written material covering the training course topics that may serve as reference material following completion of the course. [40 CFR §60.4810(c)(3)]

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- iv. The operator training course shall be completed by the date before an employee assumes responsibility for operating the SSI unit or assumes responsibility for supervising the operation of the SSI unit. [40 CFR §60.4815(b)]
- v. To maintain qualification, the operator shall complete an annual review or refresher course covering, at a minimum, the five topics described below: [40 CFR §60.4825]
 - (A) Update of regulations. [40 CFR §60.4825(a)]
 - (B) Incinerator operation, including startup and shutdown procedures, sewage sludge feeding, and ash handling. [40 CFR §60.4825(b)]
 - (C) Inspection and maintenance. [40 CFR §60.4825(c)]
 - (D) Prevention of malfunctions or conditions that may lead to malfunction. [40 CFR §60.4825(d)]
 - (E) Discussion of operating problems encountered by attendees. [40 CFR §60.4825(e)]
- vi. The operator shall renew a lapsed operator qualification before beginning operation of a SSI unit by one of the two methods specified below:
 - (A) For a lapse of less than three years, the operator shall complete a standard annual refresher course described in 40 CFR §60.4825. [40 CFR §60.4830(a)]
 - (B) For a lapse of three years or more, the operator shall repeat the initial qualification requirements in 40 CFR §60.4820(a). [40 CFR §60.4830(b)]
- vii. When a qualified operator is not accessible for more than eight hours, the SSI unit may be operated for less than two weeks by other plant personnel who are familiar with the operation of the SSI unit and who have completed a review of the information specified in 40 CFR §60.4840 within the past 12 months. [40 CFR §60.4835(a)]
- viii. When a qualified operator is not accessible for two weeks or more, the Permittee shall take the two actions that are described in 40 CFR §§60.4835(b)(1) and (b)(2). [40 CFR §60.4835(b)]

b. Monitoring Requirements

- i. The Permittee shall establish a program for reviewing the information listed in 40 CFR §60.4910(c)(1) with each qualified incinerator operator and other plant personnel who may operate the unit according to the provisions of 40 CFR §60.4835(a), according to the following schedule: [40 CFR §60.4840(b)]
 - (A) The initial review of the information listed in 40 CFR §60.4910(c)(1) shall be conducted within six months after the effective date of 40 CFR Part 60, Subpart LLLL or prior to an employee's assumption of responsibilities for operation of the SSI unit, whichever date is later. [40 CFR §60.4840(b)(1)]
 - (B) Subsequent annual reviews of the information listed in 40 CFR §60.4910(c)(1) shall be conducted no later than 12 months following the previous review. [40 CFR §60.4840(b)(2)]

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c. Record Keeping Requirements

- i. The Permittee shall record the period when a qualified operator was not accessible and include this deviation in the annual report as specified under 40 CFR §60.4915(d). [40 CFR §60.4835(a)]
- ii. The Permittee shall maintain at the facility the documentation of the operator training procedures specified under 40 CFR §60.4910(c)(1) and make the documentation readily accessible to all SSI unit operators. [40 CFR §60.4840(a)]
- iii. The Permittee shall maintain the following records for a period of at least five years. All records shall be available on site in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator. The Permittee shall make available and readily accessible at the facility at all times for all SSI unit operators the documentation specified below: [40 CFR §60.4910(c)(1)]
 - (A) Summary of the applicable standards under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4910(c)(1)(i)]
 - (B) Procedures for receiving, handling, and feeding sewage sludge. [40 CFR §60.4910(c)(1)(ii)]
 - (C) Incinerator startup, shutdown, and malfunction preventative and corrective procedures. [40 CFR §60.4910(c)(1)(iii)]
 - (D) Procedures for maintaining proper combustion air supply levels. [40 CFR §60.4910(c)(1)(iv)]
 - (E) Procedures for operating the incinerator and associated air pollution control systems within the standards established under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4910(c)(1)(v)]
 - (F) Monitoring procedures for demonstrating compliance with the incinerator operating limits. [40 CFR §60.4910(c)(1)(vi)]
 - (G) Reporting and recordkeeping procedures. [40 CFR §60.4910(c)(1)(vii)]
 - (H) Procedures for handling ash. [40 CFR §60.4910(c)(1)(viii)]
 - (I) A list of the materials burned during the performance test, if in addition to sewage sludge. [40 CFR §60.4910(c)(1)(ix)]
 - (J) For each qualified operator and other plant personnel who may operate the unit according to the provisions of 40 CFR §60.4835(a), the phone and/or pager number at which they can be reached during operating hours. [40 CFR §60.4910(c)(1)(x)]
- iv. Records showing the names of SSI unit operators and other plant personnel who may operate the unit according to the provisions of 40 CFR §60.4835(a), as follows: [40 CFR §60.4910(c)(2)]
 - (A) Records showing the names of SSI unit operators and other plant personnel who have completed review of the information in 40 CFR §60.4910(c)(1) as required by 40 CFR

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§60.4840(b), including the date of the initial review and all subsequent annual reviews.
[40 CFR §60.4910(c)(2)(i)]

- (B) Records showing the names of the SSI operators who have completed the operator training requirements under 40 CFR §60.4810, met the criteria for qualification under 40 CFR §60.4820, and maintained or renewed their qualification under 40 CFR §60.4825 or 40 CFR §60.4830. Records shall include documentation of training, including the dates of their initial qualification and all subsequent renewals of such qualifications.
[40 CFR §60.4910(c)(2)(ii)]

- v. Records showing the periods when no qualified operators were accessible for more than eight hours, but less than two weeks, as required in 40 CFR §60.4835(a).
[40 CFR §60.4910(c)(3)]
- vi. Records showing the periods when no qualified operators were accessible for two weeks or more along with copies of reports submitted as required in 40 CFR §60.4835(b).
[40 CFR §60.4910(c)(4)]

d. Reporting Requirements

- i. The Permittee shall notify the Administrator of this deviation (i.e. qualified operators are temporarily not accessible for two weeks or more) in writing within ten days. In the notice, state what caused this deviation, what the Permittee is doing to ensure that a qualified operator is accessible, and when the Permittee anticipates that a qualified operator will be accessible.
[40 CFR §60.4835(b)(1)]
- ii. The Permittee shall submit a status report to the Administrator every four weeks outlining what the Permittee is doing to ensure that a qualified operator is accessible, stating when the Permittee anticipates that a qualified operator will be accessible, and requesting approval from the Administrator to continue operation of the SSI unit. The Permittee shall submit the first status report four weeks after the Permittee notifies the Administrator of the deviation under 40 CFR §60.4835(b)(1). [40 CFR §60.4835(b)(2)]
 - (A) If the Administrator notifies the Permittee that their request to continue operation of the SSI unit is disapproved, the SSI unit may continue operation for 30 days, and then shall cease operation. [40 CFR §60.4835(b)(2)(i)]
 - (B) Operation of the unit may resume if a qualified operator is accessible as required under 40 CFR §60.4810(a). The Permittee shall notify the Administrator within five days of having resumed operations and of having a qualified operator accessible.
[40 CFR §60.4835(b)(2)(ii)]

19. Ash Handling System

a. Limitation or Restriction

- i. The Permittee shall meet the operating requirements in their site-specific fugitive emission monitoring plan, submitted as specified in 40 CFR §60.4880(d) to ensure that the ash handling system will meet the emission standard for fugitive emissions from ash handling.
[40 CFR §60.4850(d)]

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- ii. The Permittee shall meet any new operating limits and requirements, re-established according to 40 CFR §60.4890(d). [40 CFR §60.4850(g)]

b. *Monitoring Requirements*

- i. The Permittee shall perform annual visible emission tests to ensure that there are no visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) for no more than 5% of the hourly observation period.
[Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4845; 40 CFR §60.4900(a)(3); 40 CFR Part 60, Subpart LLLL, Table 2]
- ii. *Demonstrate continuous compliance using a performance test*-Except as provided in 40 CFR §60.4885(a)(3) and (e), following the date that the initial performance test for each pollutant in 40 CFR Part 60, Subpart LLLL, Table 2 except carbon monoxide is completed, the Permittee shall conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test shall be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in 40 CFR Part 60, Subpart LLLL, Table 2 and according to the testing, monitoring, and calibration requirements specified in 40 CFR §60.4900(a).
[40 CFR §60.4885(a); 40 CFR Part 60, Subpart LLLL, Table 2]
 - (A) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time. [40 CFR §60.4885(a)(1)]
 - (B) The Permittee shall repeat the performance test within 60 days of a process change, as defined in 40 CFR §60.4930. [40 CFR §60.4885(a)(2)]
 - (C) Except as specified in 40 CFR §§60.4885(a)(1) and (2), the Permittee can conduct performance tests less often for a given pollutant (i.e. ash handling system), as follows:
[40 CFR §60.4885(a)(3)]
 - (1) The Permittee can conduct performance tests less often if their performance tests for the pollutant for at least two consecutive years show that the emissions are at or below 75% of the emission limit specified in 40 CFR Part 60, Subpart LLLL, Table 2 or 3, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the Permittee does not have to conduct a performance test for that pollutant for the next two years. The Permittee shall conduct a performance test during the third year and no more than 37 months after the previous performance test.
[40 CFR §60.4885(a)(3)(i)]
 - (2) If the SSI unit continues to meet the emission limit for the pollutant, the Permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75% of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test shall be conducted no more than 37 months after the previous performance test. [40 CFR §60.4885(a)(3)(ii)]
 - (3) If a performance test shows emissions exceeded 75% of the emission limit for a pollutant, the Permittee shall conduct annual performance tests for that pollutant until

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all performance tests over two consecutive years show compliance.
[40 CFR §60.4885(a)(3)(iii)]

- iii. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Administrator in writing as specified in 40 CFR §60.4915(g). The Permittee shall conduct the performance test as soon as practicable after the force majeure event occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline, and will notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, the Permittee remains strictly subject to the requirements of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4885(e)]
- iv. The Permittee shall continuously monitor the operating parameters specified in 40 CFR §60.4890(a)(1) and (a)(2) using the continuous monitoring equipment and according to the procedures specified in 40 CFR §60.4905 or established in 40 CFR §60.4855. To determine compliance, the Permittee shall use the data averaging period specified in 40 CFR Part 60, Subpart LLLL, Table 3 unless a different averaging period is established under 40 CFR §60.4855. [40 CFR §60.4890(a)]
 - (A) The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR §60.4855 and 40 CFR §60.4870 and 40 CFR §60.4890(d) for each applicable operating parameter. [40 CFR §60.4890(a)(1)]
- v. The Permittee shall confirm their operating limits according to 40 CFR §60.4890(d)(1) or re-establish operating limits according to 40 CFR §60.4890(d)(2). The Permittee's operating limits shall be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the Permittee's operating requirements in the fugitive emissions monitoring plan specified in 40 CFR §60.4850(d). [40 CFR 60.4890(d)]
 - (A) The Permittee's operating limits shall be based on operating data recorded during any performance test required in 40 CFR §60.4885(a). [40 CFR §60.4890(d)(1)]
 - (B) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR §60.4890(d)(2)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.A.19.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

- i. The Permittee shall submit a monitoring plan specifying the ash handling system operating procedures that will be followed to ensure that the Permittee meets the fugitive emissions limit specified in 40 CFR Part 60, Subpart LLLL, Table 2. [40 CFR §60.4850(d); 40 CFR §60.4880(d)]
- ii. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR §60.4890(a) constitutes a deviation from the operating limits established under 40 CFR Part 60, Subpart LLLL, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. The Permittee shall submit the deviation report specified in 40 CFR

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§60.4915(e) for each instance that the Permittee did not meet one of the operating limits established under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4890(b)]

20. 40 CFR Part 60, Subpart LLLL

a. Limitation or Restriction

- i. The Permittee shall meet the applicable operating limits and requirements in 40 CFR §60.4850, and establish applicable operating limits according to 40 CFR §60.4870. [40 CFR §60.4855(a)]
- ii. The emission limits and standards apply at all times and during periods of malfunction. The operating limits apply at all times that sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). [40 CFR §60.4860]
- iii. *Bypass stack*-Use of the bypass stack at any time that sewage sludge is being charged to the SSI unit is an emissions standards deviation for all pollutants listed in 40 CFR Part 60, Subpart LLLL, Table 2. The use of the bypass stack during a performance test invalidates the performance test. [40 CFR §60.4900(d)]
- iv. If the SSI unit has a bypass stack, the Permittee shall install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time, and duration. [40 CFR §60.4905(d)]

b. Monitoring and Testing Requirements

- i. For each continuous monitoring system, the Permittee's monitoring plan shall address the elements and requirements specified in 40 CFR §60.4880 (a)(1-8). The Permittee shall operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan. [40 CFR §60.4880(a)]
 - (A) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). [40 CFR §60.4880(a)(1)]
 - (B) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems. [40 CFR §60.4880(a)(2)]
 - (C) Performance evaluation procedures and acceptance criteria (e.g., calibrations). [40 CFR §60.4880(a)(3)]
 - (1) For continuous emissions monitoring systems, the Permittee's performance evaluation and acceptance criteria shall include, but is not limited to, the following: [40 CFR §60.4880(a)(3)(i)]
 - (a) The applicable requirements for continuous emissions monitoring systems specified in 40 CFR §60.13. [40 CFR §60.4880(a)(3)(i)(A)]
 - (b) The applicable performance specifications (e.g., relative accuracy tests) in

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appendix B of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4880(a)(3)(i)(B)]

- (c) The applicable procedures (*e.g.*, quarterly accuracy determinations and daily calibration drift tests) in 40 CFR Part 60, Subpart LLLL, Appendix F. [40 CFR §60.4880(a)(3)(i)(C)]
 - (d) A discussion of how the occurrence and duration of out-of-control periods will affect the suitability of CEMS data, where out-of-control has the meaning given in 40 CFR §60.4880(a)(7)(i). [40 CFR §60.4880(a)(3)(i)(D)]
- (D) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR §60.11(d). [40 CFR §60.4880(a)(4)]
- (E) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR §60.13. [40 CFR §60.4880(a)(5)]
- (F) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR §§60.7(b), (c), (c)(1), (c)(4), (d), (e), (f) and (g). [40 CFR §60.4880(a)(6)]
- (G) Provisions for periods when the continuous monitoring system is out of control, as follows: [40 CFR §60.4880(a)(7)]
 - (1) A continuous monitoring system is out of control if the conditions of 40 CFR §60.4880(a)(7)(i)(A) or 40 CFR §60.4880(a)(7)(i)(B) are met. [40 CFR §60.4880(a)(7)(i)]
 - (a) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard. [40 CFR §60.4880(a)(7)(i)(A)]
 - (b) The continuous monitoring system fails a performance test audit (*e.g.*, cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit. [40 CFR §60.4880(a)(7)(i)(B)]
 - (2) When the continuous monitoring system is out of control as specified in 40 CFR §60.4880(a)(7)(i), the Permittee shall take the necessary corrective action and shall repeat all necessary tests that indicate that the system is out of control. The Permittee shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the Permittee conducts a performance check (*e.g.*, calibration drift) that indicates an exceedance of the performance requirements established under 40 CFR Part 60, Subpart LLLL. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. [40 CFR §60.4880(a)(7)(ii)]
- ii. *Performance testing requirements*-All performance tests shall consist of a minimum of three test runs conducted under conditions representative of normal operations, as specified in 40 CFR §60.8(c). Emissions in excess of the emission limits or standards during periods of startup, shutdown, and malfunction are considered deviations from the applicable emission limits or

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standards. [40 CFR §60.4900(a)(1)]

- (A) All performance tests shall be conducted using the test methods, minimum sampling volume, observation period, and averaging methods specified in 40 CFR Part 60, Subpart LLLL, Table 2. [40 CFR §60.4900(a)(3)]
- (B) Method 1 at 40 CFR Part 60, Appendix A-1 shall be used to select the sampling location and number of traverse points. [40 CFR §60.4900(a)(4)]
- (C) All pollutant concentrations shall be adjusted to 7% O₂ using 40 CFR §60.4900(a), Equation 1. [40 CFR §60.4900(a)(6)]
- (D) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in 40 CFR Part 60, Subpart LLLL unless the Administrator does one of the following. [40 CFR §60.4900(a)(7)]
 - (1) Specifies or approves, in specific cases, the use of a method with minor changes in methodology. [40 CFR §60.4900(a)(7)(i)]
 - (2) Approves the use of an equivalent method. [40 CFR §60.4900(a)(7)(ii)]
 - (3) Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance. [40 CFR §60.4900(a)(7)(iii)]
 - (4) Waives the requirement for performance tests because the Permittee has demonstrated by other means to the Administrator's satisfaction that the affected SSI unit is in compliance with the standard. [40 CFR §60.4900(a)(7)(iv)]
 - (5) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph is construed to abrogate the Administrator's authority to require testing under section 114 of the Clean Air Act. [40 CFR §60.4900(a)(7)(v)]
- (E) The Permittee shall provide, or cause to be provided, performance testing facilities as follows: [40 CFR §60.4900(a)(9)]
 - (1) Sampling ports adequate for the test methods applicable to the SSI unit, as follows: [40 CFR §60.4900(a)(9)(i)]
 - (a) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures. [40 CFR §60.4900(a)(9)(i)(A)]
 - (b) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures. [40 CFR §60.4900(a)(9)(i)(B)]
 - (2) Safe sampling platform(s). [40 CFR §60.4900(a)(9)(ii)]
 - (3) Safe access to sampling platform(s). [40 CFR §60.4900(a)(9)(iii)]

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- (4) Utilities for sampling and testing equipment. [40 CFR §60.4900(a)(9)(iv)]
- (F) Unless otherwise specified in 40 CFR Part 60, Subpart LLLL, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. Compliance with each emission limit shall be determined by calculating the arithmetic mean of the three runs. In the event that a sample is accidentally lost or conditions occur in which one of the three runs shall be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the Permittee's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.
[40 CFR §60.4900(a)(10)]
- (G) The Permittee shall operate the continuous monitoring system and collect data with the continuous monitoring system as follows: [40 CFR §60.4900(b)(6)]
 - (1) The Permittee shall collect data using the continuous monitoring system at all times the affected SSI unit is operating and at the intervals specified in 40 CFR §60.4900(b)(6)(ii), except for periods of monitoring system malfunctions that occur during periods specified in 40 CFR §60.4880(a)(7)(i), repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). Any such periods that the Permittee does not collect data using the continuous monitoring system constitute a deviation from the monitoring requirements and shall be reported in a deviation report. [40 CFR §60.4900(b)(6)(i)]
 - (2) The Permittee shall collect continuous emissions monitoring system data in accordance with 40 CFR §60.13(e)(2). [40 CFR §60.4900(b)(6)(ii)]
 - (3) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities conducted during monitoring system malfunctions shall not be included in calculations used to report emissions or operating levels. Any such periods shall be reported in a deviation report. [40 CFR §60.4900(b)(6)(iii)]
 - (4) Any data collected during periods when the monitoring system is out of control as specified in 40 CFR §60.4880(a)(7)(i), repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or control activities conducted during out-of-control periods shall not be included in calculations used to report emissions or operating levels. Any such periods that do not coincide with a monitoring system malfunction constitute a deviation from the monitoring requirements and shall be reported in a deviation report.
[40 CFR §60.4900(b)(6)(iv)]
 - (5) The Permittee shall use all the data collected during all periods except those periods specified in 40 CFR §60.4900(b)(6)(iii) and 40 CFR §60.4900(b)(6)(iv) in assessing the operation of the control device and associated control system.
[40 CFR §60.4900(b)(6)(v)]

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c. Record Keeping Requirements

- i. The Permittee shall maintain the items (as applicable) specified in 40 CFR §§60.4910 (a-n) for a period of at least five years. All records shall be available on site in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator: [40 CFR §60.4910]
 - (A) *Date*-Calendar date of each record. [40 CFR §60.4910(a)]
 - (B) *Siting*-All documentation produced as a result of the siting requirements of 40 CFR §60.4800 and 40 CFR §60.4805. [40 CFR §60.4910(b)]
 - (C) *Performance test reports*-The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. [40 CFR §60.4910(e)(1)]
 - (1) Retain a copy of the complete performance test report, including calculations. [40 CFR §60.4910(e)(2)]
 - (2) Keep a record of the hourly dry sludge feed rate measured during performance test runs, as specified in 40 CFR §60.4900(a)(2)(i). [40 CFR §60.4910(e)(3)]
 - (3) Keep any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations, including a record of the moisture content measured as required in 40 CFR §60.4900(a)(2)(ii) for each grab sample taken of the sewage sludge burned during the performance test. [40 CFR §60.4910(e)(4)]
 - (D) *Continuous monitoring data*-For other control devices for which the Permittee shall establish operating limits under 40 CFR §60.4855, the Permittee shall maintain data collected for all operating parameters used to determine compliance with the operating limits, at the frequencies specified in the monitoring plan. [40 CFR §60.4910(f)(3)(iv)]
 - (E) *Other records for continuous monitoring systems*-The Permittee shall keep the following records, as applicable: Keep records of any notifications to the Administrator in 40 CFR §60.4915(h)(1) of starting or stopping use of a continuous monitoring system for determining compliance with any emissions limit. [40 CFR §60.4910(g)(1)]
 - (F) *Deviation Reports*-Records of any deviation reports submitted under 40 CFR §§60.4915(e) and (f). [40 CFR §60.4910(h)]
 - (G) *Monitoring plan for continuous monitoring systems*-Records of the monitoring plans required under 40 CFR §60.4880. [40 CFR §60.4910(k)]
 - (H) *Less frequent testing*-If, consistent with 40 CFR §60.4885(a)(3), the Permittee elects to conduct performance tests less frequently than annually, the Permittee shall keep annual records that document that the emissions in the two previous consecutive years were at or below 75% of the applicable emission limit in 40 CFR Part 60, Subpart LLLL, Table 2, and document that there were no changes in source operations or air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past two years. [40 CFR §60.4910(l)]

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- (I) *Use of bypass stack*-Records indicating use of the bypass stack, including dates, times, and durations as required under 40 CFR §60.4905(d). [40 CFR §60.4910(m)]
- (J) If a malfunction occurs, the Permittee shall keep a record of the information submitted in the annual report in 40 CFR §60.4915(d)(16). [40 CFR §60.4910(n)]

d. Reporting Requirements

- i. The Permittee shall petition the Administrator for specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and to be monitored continuously thereafter. [40 CFR §60.4855(b)]
 - (A) The Permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator, and the Permittee shall comply with the operating limits as written, pending approval by the Administrator. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the Permittee of the responsibility to comply with any provision of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4855(b)(1)]
 - (B) The Permittee's petition shall include the following: [40 CFR §60.4855(b)(2)]
 - (1) Identification of the specific parameters the Permittee proposes to monitor. [40 CFR §60.4855(b)(2)(i)]
 - (2) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants. [40 CFR §60.4855(b)(2)(ii)]
 - (3) A discussion of how the Permittee will establish the upper and/or lower values for these parameters that will establish the operating limits on these parameters, including a discussion of the averaging periods associated with those parameters for determining compliance. [40 CFR §60.4855(b)(2)(iii)]
 - (4) A discussion identifying the methods the Permittee will use to measure and the instruments the Permittee will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments. [40 CFR §60.4855(b)(2)(iv)]
 - (5) A discussion identifying the frequency and methods for recalibrating the instruments the Permittee will use for monitoring these parameters. [40 CFR §60.4855(b)(2)(v)]
- ii. To establish the affirmative defense in any action to enforce such an emission limit set forth in 40 CFR §60.4845, the Permittee shall timely meet the notification requirements in 40 CFR §60.4861(b), and shall prove by a preponderance of evidence that the conditions in 40 CFR §60.4861(a)(1-9) are met. [40 CFR §60.4861(a)]

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- (A) The excess emissions meet: [40 CFR §60.4861(a)(1)]
 - (1) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and [40 CFR §60.4861(a)(1)(i)]
 - (2) Could not have been prevented through careful planning, proper design or better operation and maintenance practices, and [40 CFR §60.4861(a)(1)(ii)]
 - (3) Did not stem from any activity or event that could have been foreseen and avoided, or planned for, and [40 CFR §60.4861(a)(1)(iii)]
 - (4) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance, and [40 CFR §60.4861(a)(1)(iv)]
 - (B) Repairs were made as expeditiously as possible when the applicable emission limits were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs, and [40 CFR §60.4861(a)(2)]
 - (C) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions, and [40 CFR §60.4861(a)(3)]
 - (D) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, and [40 CFR §60.4861(a)(4)]
 - (E) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health, and [40 CFR §60.4861(a)(5)]
 - (F) All emissions monitoring and control systems were kept in operation if at all possible consistent with safety and good air pollution control practices, and [40 CFR §60.4861(a)(6)]
 - (G) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, and [40 CFR §60.4861(a)(7)]
 - (H) At all times, the affected facility was operated in a manner consistent with good practices for minimizing emissions, and [40 CFR §60.4861(a)(8)]
 - (I) A written root cause analysis has been prepared the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction. [40 CFR §60.4861(a)(9)]
- iii. The Permittee experiencing an exceedance of its emission limit(s) during a malfunction, shall notify the Administrator by telephone or facsimile (fax) transmission as soon as possible, but no later than two business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The Permittee seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in 40 CFR §60.4845 to

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demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in 40 CFR §60.4861(a). The Permittee may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the Permittee is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance. [40 CFR §60.4861(b)]

- iv. The Permittee may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the standards of 40 CFR Part 60, Subpart LLLL, subject to the provisions of 40 CFR §§60.4880(e)(1-6). [40 CFR §60.4880(e)]
 - (A) The Administrator will not approve averaging periods other than those specified in 40 CFR §60.4880(e), unless the Permittee documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved over the duration of three performance test runs. [40 CFR §60.4880(e)(1)]
 - (B) If the application to use an alternate monitoring requirement is approved, the Permittee shall continue to use the original monitoring requirement until approval is received to use another monitoring requirement. [40 CFR §60.4880(e)(2)]
 - (C) The Permittee shall submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application shall contain the information specified in 40 CFR §60.4880 (e)(3)(i-iii): [40 CFR §60.4880(e)(3)]
 - (1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach. [40 CFR §60.4880(e)(3)(i)]
 - (2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated. [40 CFR §60.4880(e)(3)(ii)]
 - (3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard. [40 CFR §60.4880(e)(3)(iii)]
 - (D) The Administrator will notify the Permittee of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide the following: [40 CFR §60.4880(e)(4)]
 - (1) Notice of the information and findings upon which the intended disapproval is based. [40 CFR §60.4880(e)(4)(i)]
 - (2) Notice of opportunity for the Permittee to present additional supporting information before final action is taken on the application. This notice will specify how much

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additional time is allowed for the Permittee to provide additional supporting information. [40 CFR §60.4880(e)(4)(ii)]

- (E) The Permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the Permittee of the responsibility to comply with any provision of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4880(e)(5)]
 - (F) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4880(e)(6)]
 - (G) The Permittee shall update and resubmit their monitoring plan if there are any changes or potential changes in the monitoring procedures or if there is a process change, as defined in 40 CFR §60.4930. [40 CFR §60.4880(h)]
- v. The Permittee shall submit the annual compliance report specified in 40 CFR §60.4915(d). The Permittee shall submit the deviation report specified in 40 CFR §60.4915(e) for each instance that the Permittee did not meet each emission limit in 40 CFR Part 60, Subpart LLLL, Table 2. [40 CFR §60.4885(d); 40 CFR §60.4890(c)]
 - vi. After any initial requests in 40 CFR §60.4880 for alternative monitoring requirements for initial compliance, the Permittee may subsequently petition the Administrator for alternative monitoring parameters as specified in 40 CFR §60.13(i) and 40 CFR §60.4880(e). [40 CFR 60.4885(f)]
 - vii. The Permittee shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, *etc.*) in conducting the scheduled performance test, the Permittee shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement. [40 CFR §60.4900(a)(8)]
 - viii. *Annual Compliance Report*- The Permittee shall submit an annual compliance report that includes the items listed in 40 CFR §60.4915(d)(1-16) for the reporting period specified in 40 CFR §60.4915(d)(3). The Permittee shall submit the first annual compliance report no later than 12 months following the submission of the initial compliance report in 40 CFR §60.4915(c). The Permittee shall submit subsequent annual compliance reports no more than 12 months following the previous annual compliance report. (The Permittee may be required to submit these reports (or additional compliance information) more frequently by the Title V operating permit required in 40 CFR §60.4920.) [Permit Nos. 075-0006, 075-0007 and 075-0008; 40 CFR §60.4915(d); 40 CFR Part 60, Subpart LLLL, Table 5]
- (A) Company name, physical address, and mailing address. [40 CFR §60.4915(d)(1)]
 - (B) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR §60.4915(d)(2)]

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- (C) Date of report and beginning and ending dates of the reporting period.
[40 CFR §60.4915(d)(3)]
- (D) If a performance test was conducted during the reporting period, the results of that performance test. If operating limits were established during the performance test, include the value for each operating limit and, as applicable, the method used to establish each operating limit, including calculations. [40 CFR §60.4915(d)(4)(i)]
- (E) For each pollutant and operating parameter recorded using a continuous monitoring system, the highest average value and lowest average value recorded during the reporting period, as follows: [40 CFR §60.4915(d)(5)]
 - (1) For continuous emission monitoring systems and continuous automated sampling systems, report the highest and lowest 24-hour average emission value.
[40 CFR §60.4915(d)(5)(i)]
 - (2) For continuous parameter monitoring systems, report the following values:
[40 CFR §60.4915(d)(5)(ii)]
 - (a) For all operating parameters except scrubber liquid pH, the highest and lowest 12-hour average values. [40 CFR §60.4915(d)(5)(ii)(A)]
 - (b) For scrubber liquid pH, the highest and lowest 3-hour average values.
[40 CFR §60.4915(d)(5)(ii)(B)]
- (F) If there are no deviations during the reporting period from any emission limit, emission standard, or operating limit that applies to the Permittee, a statement that there were no deviations from the emission limits, emission standard, or operating limits.
[40 CFR §60.4915(d)(6)]
- (G) If a performance evaluation of a continuous monitoring system was conducted, the results of that performance evaluation. If new operating limits were established during the performance evaluation, include calculations for establishing those operating limits.
[40 CFR §60.4915(d)(8)]
- (H) If the Permittee elects to conduct performance tests less frequently as allowed in 40 CFR §60.4885(a)(3) and did not conduct a performance test during the reporting period, the Permittee shall include the dates of the last two performance tests, a comparison of the emission level the Permittee achieved in the last two performance tests to the 75% emission limit threshold specified in 40 CFR §60.4885(a)(3), and a statement as to whether there have been any process changes and whether the process change resulted in an increase in emissions. [40 CFR §60.4915(d)(9)]
- (I) Documentation of periods when all qualified SSI unit operators were unavailable for more than eight hours, but less than two weeks. [40 CFR §60.4915(d)(10)]
- (J) Results of annual air pollution control device inspections recorded under 40 CFR §60.4910(d) for the reporting period, including a description of repairs.
[40 CFR §60.4915(d)(11)]

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- (K) If there were no periods during the reporting period when the continuous monitoring systems had a malfunction, a statement that there were no periods during which the continuous monitoring systems had a malfunction. [40 CFR §60.4915(d)(12)]
 - (L) If there were no periods during the reporting period when a continuous monitoring system was out of control, a statement that there were no periods during which the continuous monitoring system was out of control. [40 CFR §60.4915(d)(13)]
 - (M) If there were no operator training deviations, a statement that there were no such deviations during the reporting period. [40 CFR §60.4915(d)(14)]
 - (N) If the Permittee did not make revisions to the site-specific monitoring plan during the reporting period, a statement that the Permittee did not make any revisions to the site-specific monitoring plan during the reporting period. If the Permittee made revisions to the site-specific monitoring plan during the reporting period, a copy of the revised plan. [40 CFR §60.4915(d)(15)]
 - (O) If the Permittee had a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CR §60.11(d), including actions taken to correct a malfunction. [40 CFR §60.4915(d)(16)]
- ix. *Deviation Reports*-The Permittee shall submit a deviation report if:
[40 CFR §60.4915(e)(1); 40 CFR Part 60, Subpart LLLL, Table 5]
- (A) Any recorded operating parameter level, based on the averaging time specified in 40 CFR Part 60, Subpart LLLL, Table 3, is above the maximum operating limit or below the minimum operating limit established under 40 CFR Part 60, Subpart LLLL. [40 CFR §60.4915(e)(1)(i); 40 CFR Part 60, Subpart LLLL, Table 3]
 - (B) Any recorded 24-hour block average emissions level is above the emission limit, if a continuous monitoring system is used to comply with an emission limit. [40 CFR §60.4915(e)(1)(iii)]
 - (C) There are visible emissions of combustion ash from an ash conveying system for more than 5% of the hourly observation period. [40 CFR §60.4915(e)(1)(iv)]
 - (D) A performance test was conducted that deviated from any emission limit in 40 CFR Part 60, Subpart LLLL, Table 2. [40 CFR §60.4915(e)(1)(v)]
 - (E) A continuous monitoring system was out of control. [40 CFR §60.4915(e)(1)(vi)]
 - (F) The Permittee had a malfunction (e.g., continuous monitoring system malfunction) that caused or may have caused any applicable emission limit to be exceeded. [40 CFR §60.4915(e)(1)(vii)]
 - (G) The deviation report shall be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following

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year for data the Permittee collected during the second half of the calendar year (July 1 to December 31).

[Permit Nos. 075-0006, 075-0007 and 075-0008, 40 CFR §60.4915(e)(2); 40 CFR Part 60, Subpart LLLL, Table 5]

- (H) For each deviation where the Permittee is using a continuous monitoring system to comply with an associated emission limit or operating limit, report the items described in 40 CFR §§60.4915 (e)(3)(i-viii). [40 CFR §60.4915(e)(3)]
- (1) Company name, physical address, and mailing address. [40 CFR §60.4915(e)(3)(i)]
 - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR §60.4915(e)(3)(ii)]
 - (3) The calendar dates and times the unit deviated from the emission limits, emission standards, or operating limits requirements. [40 CFR §60.4915(e)(3)(iii)]
 - (4) The averaged and recorded data for those dates. [40 CFR §60.4915(e)(3)(iv)]
 - (5) Duration and cause of each deviation from the following: [40 CFR §60.4915(e)(3)(v)]
 - (a) Emission limits, emission standards, operating limits, and corrective actions. [40 CFR §60.4915(e)(3)(v)(A)]
 - (b) Bypass events and corrective actions. [40 CFR §60.4915(e)(3)(v)(B)]
 - (6) Dates, times, and causes for monitor downtime incidents. [40 CFR §60.4915(e)(3)(vi)]
 - (7) A copy of the operating parameter monitoring data during each deviation and any test report that documents the emission levels. [40 CFR §60.4915(e)(3)(vii)]
 - (8) If there were periods during which the continuous monitoring system malfunctioned or was out of control, the Permittee shall include the following information for each deviation from an emission limit or operating limit: [40 CFR §60.4915(e)(3)(viii)]
 - (a) The date and time that each malfunction started and stopped. [40 CFR §60.4915(e)(3)(viii)(A)]
 - (b) The date, time, and duration that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks. [40 CFR §60.4915(e)(3)(viii)(B)]
 - (c) The date, time, and duration that each continuous monitoring system was out of control, including start and end dates and hours and descriptions of corrective actions taken. [40 CFR §60.4915(e)(3)(viii)(C)]
 - (d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction, during a period when the system was out of control, or during another period. [40 CFR §60.4915(e)(3)(viii)(D)]

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- (e) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period. [40 CFR §60.4915(e)(3)(viii)(E)]
- (f) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
[40 CFR §60.4915(e)(3)(viii)(F)]
- (g) A summary of the total duration of continuous monitoring system downtime during the reporting period, and the total duration of continuous monitoring system downtime as a percent of the total operating time of the SSI unit at which the continuous monitoring system downtime occurred during that reporting period. [40 CFR §60.4915(e)(3)(viii)(G)]
- (h) An identification of each parameter and pollutant that was monitored at the SSI unit. [40 CFR §60.4915(e)(3)(viii)(H)]
- (i) A brief description of the SSI unit. [40 CFR §60.4915(e)(3)(viii)(I)]
- (j) A brief description of the continuous monitoring system.
[40 CFR §60.4915(e)(3)(viii)(J)]
- (k) The date of the latest continuous monitoring system certification or audit.
[40 CFR §60.4915(e)(3)(viii)(K)]
- (l) A description of any changes in continuous monitoring system, processes, or controls since the last reporting period. [40 CFR §60.4915(e)(3)(viii)(L)]
- (I) For each deviation where the Permittee is not using a continuous monitoring system to comply with the associated emission limit or operating limit, report the following items:
[40 CFR §60.4915(e)(4)]
 - (1) Company name, physical address, and mailing address. [40 CFR §60.4915(e)(4)(i)]
 - (2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR §60.4915(e)(4)(ii)]
 - (3) The total operating time of each affected SSI during the reporting period.
[40 CFR §60.4915(e)(4)(iii)]
 - (4) The calendar dates and times the unit deviated from the emission limits, emission standards, or operating limits requirements. [40 CFR §60.4915(e)(4)(iv)]
 - (5) The averaged and recorded data for those dates. [40 CFR §60.4915(e)(4)(v)]
 - (6) Duration and cause of each deviation from the following:
[40 CFR §60.4915(e)(4)(vi)]

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- (a) Emission limits, emission standard, and operating limits, and corrective actions. [40 CFR §60.4915(e)(4)(vi)(A)]
 - (b) Bypass events and corrective actions. [40 CFR §60.4915(e)(4)(vi)(B)]
- (7) A copy of any performance test report that showed a deviation from the emission limits or standard. [40 CFR §60.4915(e)(4)(vii)]
- (8) A brief description of any malfunction reported in 40 CFR §60.4915(e)(1)(vii), including a description of actions taken during the malfunction to minimize emissions in accordance with 40 CFR §60.11(d) and to correct the malfunction. [40 CFR §60.4915(e)(4)(viii)]
- x. *Qualified operator deviation*-If all qualified operators are not accessible for two weeks or more, the Permittee shall take the two actions in 40 CFR §60.4915 (f)(1)(i) and 40 CFR §60.4915 (f)(1)(ii). [40 CFR §60.4915(f)(1); 40 CFR Part 60, Subpart LLLL, Table 5]
 - (A) Submit a notification of the deviation within ten days that includes the three items in 40 CFR §60.4915(f)(1)(i)(A-C). [40 CFR §60.4915(f)(1)(i)]
 - (1) A statement of what caused the deviation. [40 CFR §60.4915(f)(1)(i)(A)]
 - (2) A description of actions taken to ensure that a qualified operator is accessible. [40 CFR §60.4915(f)(1)(i)(B)]
 - (3) The date when the Permittee anticipates that a qualified operator will be available. [40 CFR §60.4915(f)(1)(i)(C)]
 - (B) Submit a status report to the Administrator every four weeks that includes the three items in 40 CFR §60.4915 (f)(1)(ii)(A-C). [40 CFR §60.4915(f)(1)(ii)]
 - (1) A description of actions taken to ensure that a qualified operator is accessible. [40 CFR §60.4915(f)(1)(ii)(A)]
 - (2) The date when the Permittee anticipates that a qualified operator will be accessible. [40 CFR §60.4915(f)(1)(ii)(B)]
 - (3) Request for approval from the Administrator to continue operation of the SSI unit. [40 CFR §60.4915(f)(1)(ii)(C)]
 - (C) If the Permittee's unit was shut down by the Administrator, under the provisions of 40 CFR §60.4835(b)(2)(i), due to a failure to provide an accessible qualified operator, the Permittee shall notify the Administrator within five days of meeting 40 CFR §60.4835(b)(2)(ii) that the Permittee is resuming operation. [40 CFR §60.4915(f)(2)]
- xi. *Notification of a force majeure*-If a force majeure is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure: [40 CFR §60.4915(g); 40 CFR Part 60, Subpart LLLL, Table 5]
 - (A) The Permittee shall notify the Administrator, in writing as soon as practicable following the

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date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in conducting a performance test beyond the regulatory deadline, but the notification shall occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable. [40 CFR §60.4915(g)(1)]

- (B) The Permittee shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in conducting the performance test beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee shall propose to conduct the performance test. [40 CFR §60.4915(g)(2)]

xii. *Other notifications and reports required*-The Permittee shall submit other notifications as provided by 40 CFR §60.7 and as follows:
[40 CFR §60.4915(h); 40 CFR Part 60, Subpart LLLL, Table 5]

- (A) The Permittee shall notify the Administrator one month before starting or stopping use of a continuous monitoring system for determining compliance with any emission limit.
[40 CFR §60.4915(h)(1)]
- (B) The Permittee shall notify the Administrator at least 30 days prior to any performance test conducted to comply with the provisions of 40 CFR Part 60, Subpart LLLL, to afford the Administrator the opportunity to have an observer present. [40 CFR §60.4915(h)(2)]
- (C) As specified in 40 CFR §60.4900(a)(8), the Permittee shall notify the Administrator at least seven days prior to the date of a rescheduled performance test for which notification was previously made in 40 CFR §60.4915(h)(2). [40 CFR §60.4915(h)(3)]

xiii. *Report submission form*-Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates. [40 CFR §60.4915(i)(1)]

- (A) Within 60 days after the date of completing each performance test, as defined in 40 CFR §63.2, conducted to demonstrate compliance with 40 CFR Part 60, Subpart LLLL, the Permittee shall submit relative accuracy test audit (*i.e.*, reference method) data and performance test (*i.e.*, compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (*see* http://www.epa.gov/ttn/chief/ert/ert_tool.html/) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.
[40 CFR §60.4915(i)(2)]

xiv. *Changing report dates*-If the Administrator agrees, the Permittee may change the semi-annual or annual reporting dates. See 40 CFR §60.19(c) for procedures to seek approval to change the reporting date. [40 CFR §60.4915(j)]

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B. EU-023 (UV Facility Emergency Generator)

Permit or Regulation Number: RCSA §22a-174-3b; 40 CFR 60, Subpart IIII

(NSPS Designation: Construction/Ordered Date = 6/2011, Model Year of Engine = 2011, Displacement <30 L/cylinder, Maximum Rating = 1000 kW or 1474 bhp)

1. Maximum Hours of Operation

a. Limitation or Restriction

The Permittee shall not allow the operation of the emergency engine to exceed 300 hours during any 12 month rolling aggregate. [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(2)(C)]

b. Monitoring Requirements

Record keeping specified in Section III.B.1.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the information necessary for the commissioner to determine compliance with the requirements of RCSA §22a-174-3b(e)(2). Information sufficient to make such determinations may include the information specified in RCSA §22a-174-3b(e)(4). All records made to determine compliance with the requirements of RCSA §22a-174-3b(e)(3) shall be: [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(3)]

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five years from the date such record is created.

- ii. The Permittee of an emergency engine shall make and keep records of the hours of operation for each month and each 12 month rolling aggregate. [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(4)]

d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

2. Fuel Sulfur Content

a. Limitation or Restriction

- i. Any nongaseous fuel consumed by the emergency engine shall not exceed the sulfur content of motor vehicle diesel fuel where "motor vehicle diesel fuel" is defined in RCSA §22a-174-42. [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(2)(D)]
- ii. The Permittee shall not cause or allow the fuel sulfur content to exceed the emission limit stated herein at any time: 0.0015% by weight. [RCSA §22a-174-19b(d)(2)]

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b. Monitoring Requirements

Record keeping specified in Section III.B.2.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of RCSA §22a-174-3b(e)(2). Information sufficient to make such determinations may include the information specified in RCSA §22a-174-3b(e)(4). All records made to determine compliance with the requirements of RCSA §22a-174-3b(e)(3) shall be:
[STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(3)]

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five years from the date such record is created.

- ii. The following records are sufficient to demonstrate the sulfur content of fuel used as required by RCSA §22a-174-3b(e): [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(h)(1-3)]

(A) A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;

(B) A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or

(C) A copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment

- iii. Any person combusting fuel subject to the requirements of RCSA §22a-174-19b shall maintain records of the sulfur content of the fuel combusted and the quantity purchased for combustion. A written certification or a written contract with a fuel supplier is sufficient to satisfy the requirements of this subdivision if the certification or contract identifies:
[RCSA §22a-174-19b(g)(3)]

(A) The name of the fuel seller;

(B) The type of fuel purchased;

(C) The sulfur content of the fuel purchased; and

(D) The method used to determine the sulfur content of the fuel purchased.

- iv. All records made to demonstrate compliance with the requirements of RCSA §22a-174-19b shall be:
[RCSA §22a-174-19b(g)(4)]

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five years from the date such record is created.

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30

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days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

3. NO_x

a. *Limitation or Restriction*

The Permittee shall not operate the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to unhealthy for sensitive groups” or greater. If, subsequent to the initial forecast of “moderate to unhealthy for sensitive groups” or greater, the forecast is revised to “moderate” or lower, the Permittee is no longer prohibited from operating the engine for routine, scheduled testing or maintenance for the remainder of that day. The Permittee may rely on an ozone forecast of “moderate” or lower obtained after 3 p.m. on the preceding day. Subsequent changes to the ozone forecast after 3 p.m. that forecast ozone levels of “moderate to unhealthy for sensitive groups” or greater shall not obligate the Permittee to refrain from operation of the emergency engine at the facility on the following day. The commissioner may exempt, by permit or order, the Permittee from RCSA §22a-174-22e(d) if such emergency engine is unattended and the testing is automated and cannot be modified from a remote location. [RCSA §22a-174-22e(d)(14)]

b. *Monitoring Requirements*

Record keeping specified in Section III.B.3.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. *Record Keeping Requirements*

- i. The Permittee shall retain all records and reports produced pursuant to RCSA §22a-174-22e for five years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records and reports shall be retained at the premises where the emission unit is located, unless the commissioner approves in writing the use of another location in Connecticut. [RCSA §22a-174-22e(j)(1)]
- ii. The Permittee shall make and keep the following records: [RCSA §22a-174-22e(j)(2)]
 - (A) For an emergency engine not subject to 40 CFR Part 63 Subpart ZZZZ, records of total monthly operating hours of such engine, identifying the dates and operating hours of nonemergency use and the reason for non-emergency operation; [RCSA §22a-174-22e(j)(2)(A)]
 - (B) The date and work performed for repairs, replacement of parts and other maintenance; [RCSA §22a-174-22e(j)(2)(B)]
 - (C) Copies of all documents submitted to the commissioner pursuant to this section; and [RCSA §22a-174-22e(j)(2)(F)]
 - (D) Any other records or reports required by an order or permit issued by the commissioner pursuant to this section. [RCSA §22a-174-22e(j)(2)(G)]

d. *Reporting Requirements*

The Permittee shall submit additional information in writing, at the commissioner’s request, within 30

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days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

4. 40 CFR Part 60, Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Limitation or Restriction

- i. The Permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [40 CFR §60.4205(b)]
- ii. The Permittee shall operate and maintain the stationary CI ICE that achieve the emission standards as required in 40 CFR §60.4205 over the entire life of the engine. [40 CFR §60.4206]
- iii. The Permittee shall use diesel fuel that meets the requirements of 40 CFR §1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR §60.4207(b)]
- iv. The Permittee shall: [40 CFR §60.4211(a)]
 - (A) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions
 - (B) Change only those emission-related settings that are permitted by the manufacturer; and
 - (C) Meet the applicable requirements of 40 CFR part 1068.
- v. The Permittee shall purchase an engine certified to the emission standards in 40 CFR §60.4204(b), or 40 CFR §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR §60.4211(c)]
- vi. The Permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR §60.4211 (f)(1-3). In order for the engine to be considered an emergency stationary ICE under 40 CFR Part 60, Subpart IIII, any operation other than emergency operation, maintenance and testing and operation in non-emergency situations for 50 hours per year, as described in 40 CFR §60.4211(f)(1-3), is prohibited. If the Permittee does not operate the engine according to the requirements in 40 CFR §60.4211(f)(1-3), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR §60.4211(f)]
- vii. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR §60.4211(f)(1)]
- viii. The Permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR §60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR §60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR §60.4211(f)(2). [40 CFR §60.4211(f)(2)]
- ix. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided

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that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR §60.4211(f)(2)(i)]

- x. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR §60.4211(f)(2). Except as provided in 40 CFR §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR §60.4211(f)(3)]
- xi. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR §60.4211(f)(3)(i)(A-E)]
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.
- xii. The Permittee shall comply with the applicable General Provisions listed in 40 CFR Part 60, Subpart IIII, Table 8. [40 CFR §60.4218; 40 CFR Part 60, Subpart IIII, Table 8]

b. Monitoring Requirements

- i. If the emergency stationary CI internal combustion engine does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter prior to startup of the engine. [40 CFR §60.4209(a)]
- ii. If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR §60.4204, the diesel particulate filter shall be installed with a backpressure monitor that notifies the Permittee when the high backpressure limit of the engine is approached. [40 CFR §60.4209(b)]

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c. Record Keeping Requirements

- i. If the Permittee does not install, configure, operate, and maintain their engine and control device according to the manufacturer's emission-related written instructions, or the Permittee changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows: [40 CFR §60.4211(g)]
 - (A) The Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of startup, or within one year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within one year after the Permittee changes emission related settings in a way that is not permitted by the manufacturer. The Permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or three years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR §60.4211(g)(3)]
- ii. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the Permittee is not required to submit an initial notification. Starting with the model years in Table 5 of 40 CFR 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall make and keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR §60.4214(b)]
- iii. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the Permittee shall make and keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached. [40 CFR §60.4214(c)]
- iv. The Permittee shall make and keep records sufficient to show compliance with applicable General Provisions requirements in 40 CFR Part 60, Subpart IIII, Table 8. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. If the engine operates for the purposes specified in 40 CFR §60.4211(f)(3)(i), the Permittee shall submit an annual report according to the requirements in 40 CFR §60.4214(d)(1-3). The report shall contain the following information: [40 CFR §60.4214(d)(1)]
 - (A) Company name and address where the engine is located. [40 CFR §60.4214(d)(1)(i)]
 - (B) Date of the report and beginning and ending dates of the reporting period. [40 CFR §60.4214(d)(1)(ii)]
 - (C) Engine site rating and model year. [40 CFR §60.4214(d)(1)(iii)]

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- (D) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [40 CFR §60.4214(d)(1)(iv)]
- (E) Hours spent for operation for the purposes specified in 40 CFR §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR §60.4211(f)(3)(i). The report shall also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [40 CFR §60.4214(d)(1)(vii)]
- ii. Subsequent annual reports for each calendar year shall be submitted no later than March 31 of the following calendar year. [40 CFR §60.4214(d)(2)]
- iii. The annual report shall be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 60, Subpart IIII is not available in CEDRI at the time that the report is due, the written report shall be submitted to the Administrator at the appropriate address listed in 40 CFR §60.4. [40 CFR §60.4214(d)(3)]

C. GEU-003 (Headworks Emergency Generator Nos.1, 2 and 3)

Permit or Regulation Number: RCSA §22a-174-3b, 40 CFR 60, Subpart IIII

(NSPS Designation: Construction/Ordered Date=2016, Model Year of Engine=2013, Displacement<30L/cylinder, Maximum Rating=2500 kW or 3640 bhp)

1. Maximum Hours of Operation

a. Limitation or Restriction

The Permittee shall not allow the operation of the emergency engine to exceed 300 hours during any 12 month rolling aggregate. [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(2)(C)]

b. Monitoring Requirements

Record keeping specified in Section III.C.1.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the information necessary for the commissioner to determine compliance with the requirements of RCSA §22a-174-3b(e)(2). Information sufficient to make such determinations may include the information specified in RCSA §22a-174-3b(e)(4). All records made to determine compliance with the requirements of RCSA §22a-174-3b(e)(3) shall be: [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(3)]

(A) Made available to the commissioner to inspect and copy upon request; and

(B) Maintained for five years from the date such record is created.

- ii. The Permittee of an emergency engine shall make and keep records of the hours of operation for each month and each 12 month rolling aggregate. [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(4)]

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d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

2. Fuel Sulfur Content

a. Limitation or Restriction

- i. Any nongaseous fuel consumed by the emergency engine shall not exceed the sulfur content of motor vehicle diesel fuel where "motor vehicle diesel fuel" is defined in RCSA §22a-174-42. [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(2)(D)]
- ii. The Permittee shall not cause or allow the fuel sulfur content to exceed the emission limit stated herein at any time: 0.0015% by weight. [RCSA §22a-174-19b(d)(2)]

b. Monitoring Requirements

Record keeping specified in Section III.C.2.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall maintain records of the information necessary for the commissioner to determine compliance with the requirements of RCSA §22a-174-3b(e)(2). Information sufficient to make such determinations may include the information specified in RCSA §22a-174-3b(e)(4). All records made to determine compliance with the requirements of RCSA §22a-174-3b(e)(3) shall be:
[STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(e)(3)]
 - (A) Made available to the commissioner to inspect and copy upon request; and
 - (B) Maintained for five years from the date such record is created.
- ii. The following records are sufficient to demonstrate the sulfur content of fuel used as required by RCSA §22a-174-3b(e): [STATE ONLY REQUIREMENT] [RCSA §22a-174-3b(h)(1-3)]
 - (A) A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;
 - (B) A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
 - (C) A copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment
- iii. Any person combusting fuel subject to the requirements of this section shall maintain records of the sulfur content of the fuel combusted and the quantity purchased for combustion. A written certification or a written contract with a fuel supplier is sufficient to satisfy the requirements of this subdivision if the certification or contract identifies:
[RCSA §22a-174-19b(g)(3)]

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- (A) The name of the fuel seller;
 - (B) The type of fuel purchased;
 - (C) The sulfur content of the fuel purchased; and
 - (D) The method used to determine the sulfur content of the fuel purchased.
- iv. All records made to demonstrate compliance with the requirements of RCSA §22a-174-19b shall be:
[RCSA §22a-174-19b(g)(4)]
- (A) Made available to the commissioner to inspect and copy upon request; and
 - (B) Maintained for five years from the date such record is created.

d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

3. NO_x

a. Limitation or Restriction

The Permittee shall not operate the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be "moderate to unhealthy for sensitive groups" or greater. If, subsequent to the initial forecast of "moderate to unhealthy for sensitive groups" or greater, the forecast is revised to "moderate" or lower, the Permittee is no longer prohibited from operating the engine for routine, scheduled testing or maintenance for the remainder of that day. The Permittee may rely on an ozone forecast of "moderate" or lower obtained after 3 p.m. on the preceding day. Subsequent changes to the ozone forecast after 3 p.m. that forecast ozone levels of "moderate to unhealthy for sensitive groups" or greater shall not obligate the Permittee to refrain from operation of the emergency engine at the facility on the following day. The commissioner may exempt, by permit or order, the Permittee from RCSA §22a-174-22e(d) if such emergency engine is unattended and the testing is automated and cannot be modified from a remote location. [RCSA §22a-174-22e(d)(14)]

b. Monitoring Requirements

Record keeping specified in Section III.C.3.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall retain all records and reports produced pursuant to RCSA §22a-174-22e for five years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records and reports shall be retained at the premises where the emission unit is located, unless the commissioner approves in writing the use of another location in Connecticut. [RCSA §22a-174-22e(j)(1)]
- ii. The Permittee shall make and keep the following records: [RCSA §22a-174-22e(j)(2)]

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- (A) For an emergency engine not subject to 40 CFR Part 63 Subpart ZZZZ, records of total monthly operating hours of such engine, identifying the dates and operating hours of nonemergency use and the reason for non-emergency operation; [RCSA §22a-174-22e(j)(2)(A)]
- (B) The date and work performed for repairs, replacement of parts and other maintenance; [RCSA §22a-174-22e(j)(2)(B)]
- (C) Copies of all documents submitted to the commissioner pursuant to this section; and [RCSA §22a-174-22e(j)(2)(F)]
- (D) Any other records or reports required by an order or permit issued by the commissioner pursuant to this section. [RCSA §22a-174-22e(j)(2)(G)]

d. Reporting Requirements

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. [RCSA §22a-174-33(j)(1)(X)]

4. 40 CFR Part 60, Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Limitation or Restriction

- i. The Permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [40 CFR §60.4205(b)]
- ii. The Permittee shall operate and maintain the stationary CI ICE that achieve the emission standards as required in 40 CFR §60.4205 over the entire life of the engine. [40 CFR §60.4206]
- iii. The Permittee shall use diesel fuel that meets the requirements of 40 CFR §1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR §60.4207(b)]
- iv. The Permittee shall: [40 CFR §60.4211(a)]
 - (A) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions
 - (B) Change only those emission-related settings that are permitted by the manufacturer; and
 - (C) Meet the applicable requirements of 40 CFR part 1068.
- v. The Permittee shall purchase an engine certified to the emission standards in 40 CFR §60.4204(b), or 40 CFR §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR §60.4211(c)]

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- vi. The Permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR §60.4211(f)(1-3). In order for the engine to be considered an emergency stationary ICE under 40 CFR Part 60, Subpart IIII, any operation other than emergency operation, maintenance and testing and operation in non-emergency situations for 50 hours per year, as described in 40 CFR §60.4211(f)(1-3), is prohibited. If the Permittee does not operate the engine according to the requirements in 40 CFR §60.4211(f)(1-3), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR §60.4211(f)]
- vii. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR §60.4211(f)(1)]
- viii. The Permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR §60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR §60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR §60.4211(f)(2). [40 CFR §60.4211(f)(2)]
- ix. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR §60.4211(f)(2)(i)]
- x. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR §60.4211(f)(2). Except as provided in 40 CFR §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR §60.4211(f)(3)]
- xi. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR §60.4211(f)(3)(i)(A-E)]
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.

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- (E) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.
- xii. The Permittee shall comply with the applicable General Provisions listed in 40 CFR Part 60, Subpart IIII, Table 8. [40 CFR §60.4218; 40 CFR Part 60, Subpart IIII, Table 8]

b. Monitoring Requirements

- i. If the emergency stationary CI internal combustion engine does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter prior to startup of the engine. [40 CFR §60.4209(a)]
- ii. If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR §60.4204, the diesel particulate filter shall be installed with a backpressure monitor that notifies the Permittee when the high backpressure limit of the engine is approached. [40 CFR §60.4209(b)]

c. Record Keeping Requirements

- i. If the Permittee does not install, configure, operate, and maintain their engine and control device according to the manufacturer's emission-related written instructions, or the Permittee changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows: [40 CFR §60.4211(g)]
 - (A) The Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of startup, or within one year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within one year after the Permittee changes emission related settings in a way that is not permitted by the manufacturer. The Permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or three years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR §60.4211(g)(3)]
- ii. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the Permittee is not required to submit an initial notification. Starting with the model years in Table 5 of 40 CFR 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall make and keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR §60.4214(b)]
- iii. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the Permittee shall make and keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached. [40 CFR §60.4214(c)]

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- iv. The Permittee shall make and keep records sufficient to show compliance with applicable General Provisions requirements in 40 CFR Part 60, Subpart IIII, Table 8.
[RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. If the engine operates for the purposes specified in 40 CFR §60.4211(f)(3)(i), the Permittee shall submit an annual report according to the requirements in 40 CFR §60.4214(d)(1-3). The report shall contain the following information: [40 CFR §60.4214(d)(1)]
 - (A) Company name and address where the engine is located. [40 CFR §60.4214(d)(1)(i)]
 - (B) Date of the report and beginning and ending dates of the reporting period.
[40 CFR §60.4214(d)(1)(ii)]
 - (C) Engine site rating and model year. [40 CFR §60.4214(d)(1)(iii)]
 - (D) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
[40 CFR §60.4214(d)(1)(iv)]
 - (E) Hours spent for operation for the purposes specified in 40 CFR §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR §60.4211(f)(3)(i). The report shall also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [40 CFR §60.4214(d)(1)(vii)]
- ii. Subsequent annual reports for each calendar year shall be submitted no later than March 31 of the following calendar year. [40 CFR §60.4214(d)(2)]
- iii. The annual report shall be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 60, Subpart IIII is not available in CEDRI at the time that the report is due, the written report shall be submitted to the Administrator at the appropriate address listed in 40 CFR §60.4.
[40 CFR §60.4214(d)(3)]

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D. 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. **Emission Testing:** The Permittee shall comply with the procedures for sampling, emission testing, sample analysis, and reporting as set forth in RCSA §22a-174-5.
3. **Emergency Episode Procedures:** The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
4. **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.
5. **Prohibition of Air Pollution:** The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
6. **Public Availability of Information:** The public availability of information shall apply, as set forth in RCSA §22a-174-10.
7. **Prohibition Against Concealment/Circumvention:** The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
8. **Violations and Enforcement:** The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
9. **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.
10. **No Defense to Nuisance Claim:** The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.
11. **Severability:** The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
12. **Responsibility to Comply:** The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
13. **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.
14. **Fuel Sulfur Content:** The Permittee shall not use No. 2 heating oil that exceeds fifteen parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(B).
15. **Sulfur Compound Emissions:** The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §§22a-174-19, 22a-174-19a and 22a-174-19b, as applicable.
16. **Organic Compound Emissions:** The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
17. **Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide

Section III: Applicable Requirements and Compliance Demonstration

emissions as set forth in RCSA §22a-174-22e..

18. **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).
19. **Open Burning:** The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
20. **Asbestos:** Should the premises, as defined in 40 CFR §61.145, become subject to the national emission standard for asbestos regulations in 40 CFR Part 61 Subpart M when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR §61.145(b) and shall comply with all other applicable requirements of 40 CFR Part 61 Subpart M.
21. **Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
22. **Mercury, metals and hydrocarbons:** The Permittee shall conduct a stack test annually for the presence of mercury, metals and hydrocarbons in the air emissions of each incinerator.
[Permit Nos. 075-0006, 075-0007 and 075-0008; CGS 22a-191a(a) and 22a-191a(b)]
23. **Sludge Incinerator Operation:** Only two of the three Nichols-Herreshoff Incinerators may incinerate sewage sludge at the same time. [Permit Nos. 075-0006, 075-0007 and 075-0008]
24. **Maximum Annual Sludge Charging Rate:** The Maximum Annual Sludge Charging Rate for the facility is 42,120 DT/yr. [Permit Nos. 075-0006, 075-0007 and 075-0008]
 - i. The Permittee shall make and keep records of monthly and rolling 12 month total of the premises maximum annual sludge charging rate (DT/yr). [Permit Nos. 075-0006, 075-0007 and 075-0008]

Section IV: Compliance Schedule

THERE IS NO COMPLIANCE SCHEDULE

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.

SECTION V: 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.** Additional Emissions Units
 - 1.** The Permittee shall make and submit a written record, at the commissioner's request, within 30 days of receipt of notice from the commissioner, or by such other date specified by the commissioner, of each additional emissions unit or group of similar or identical emissions units at the premises.
 - 2.** Such record of additional emissions units shall include each emissions unit, or group of emissions units, at the premises which is not listed in Section II.A of this Title V permit, unless the emissions unit, or group of emissions units, is:
 - a. an insignificant emissions unit as defined in RCSA §22a-174-33; or
 - b. an emissions unit or activity listed in *White Paper for Streamlined Development of Part 70 Permit Applications, Attachment A* (EPA guidance memorandum dated July 10, 1995).
 - 3.** For each emissions unit, or group of emissions units, on such record, the record shall include, as available:
 - a. Description, including make and model;
 - b. Year of construction/installation or if a group, range of years of construction/installation;
 - c. Maximum throughput or capacity; and
 - d. Fuel type, if applicable.
- D.** 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.
- E.** 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.
- F.** 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.

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 this section.

SECTION VI: 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: Compliance Analysis and Coordination Unit, 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 submitted per the procedure required by the applicable requirement or otherwise in a computer-readable format and addressed to: Director, Enforcement and Compliance Assurance Division, U.S. EPA Region I, 5 Post Office Square, Suite 100 (Mailcode: 04-02), Boston, Massachusetts 02109-3912, Attn: Air Compliance Clerk.

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:

Section VI: Title V Requirements

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 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 §22a-174-2a(a)(5).

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

A Permittee, required to perform monitoring pursuant to 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 Title V 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.

Section VI: Title V Requirements

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 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.

Section VI: Title V Requirements

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 Section VI.E. 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).

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 -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 -33(g)(3)(B) unless imposition of such limits is required by an applicable requirement.

Section VI: Title V Requirements

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 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:

Section VI: Title V Requirements

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-60.

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 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).

Section VI: Title V Requirements

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.