



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	117-0272-TV
Client/Sequence/Town/Premises Numbers	205/1/117/48 and 50
Date Issued	July 1, 2013
Expiration Date	July 1, 2018

Corporation:

Yale University, Central / Science Campus

Premises Location:

Central Power Plant, 120 Tower Parkway, New Haven, Connecticut 06520

Name of Responsible Official and Title:

John H. Bollier, Associate Vice President for Facilities

All the following attached pages, 2 through 64, are hereby incorporated by reference into this Title V permit.

/s/ Anne Gobin for _____
Daniel C. Esty
Commissioner

July 1, 2013
Date

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Title V Operating Permit

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

LIST OF ABBREVIATIONS/ACRONYMS

<i>Abbreviation/Acronym</i>	<i>Description</i>
AP-42	EPA's Compilation of Air Pollutant Emission Factors
ASC	Actual Stack Concentration
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COMS	Continuous Opacity Monitor System
CPMS	Continuous Parameter Monitor System
DEEP	Department of Energy and Environmental Protection
EU	Emissions Unit
EPA	Environmental Protection Agency
°F	Degrees Fahrenheit
ft ³	Cubic Feet
gal	Gallon
GEU	Grouped Emissions Unit
HAP	Hazardous Air Pollutant
HP	Horsepower
hr	Hour
ICE	Internal Combustion Engine
ISO	International Organization for Standardization
J	Joule
kW	Kilowatt
lb	Pound
m ³	Cubic Meters
MASC	Maximum Allowable Stack Concentration
MMBtu	Million British Thermal Units
MMcf	Million Cubic Feet
MW	Megawatt
ng	Nanograms
NO _x	Nitrogen Oxides
NSR	New Source Review
O ₂	Oxygen
PM	Particulate Matter
PM ₁₀	Particulate Matter, less than 10 microns
PM _{2.5}	Particulate Matter, less than 2.5 microns
ppmvd	Parts per million, dry volumetric basis
RCSA	Regulations of Connecticut State Agencies
RICE	Reciprocating Internal Combustion Engine
scf	Standard Cubic Feet
SCR	Selective Catalytic Reduction
SIC	Source Identification Code
SO _x	Sulfur Oxides
SO ₂	Sulfur Dioxdes
tpy	Tons per Year
ug	Micrograms
VOC	Volatile Organic Compound

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: University – School of Higher Education
Primary SIC: 8221

Facility Mailing Address: 135 College Street, 1st Floor, New Haven, CT 06510
Telephone Number: (203) 737-4338

B. PREMISES DESCRIPTION

The Yale University Central/Science Campus located in New Haven, CT consists of a large number of buildings used for higher education, research and development laboratories, student housing, and administrative offices. Many of these buildings are interconnected and heated and cooled by the Central Power Plant, however, some of the buildings have their own source of heat and hot water, primarily small natural gas furnaces and water heaters.

Yale currently holds ten individual New Source Review (NSR) permits for emission units located at the Central/Science Campus. The remaining units either operate in accordance with RCSA §§22a-174-3b or -3c, federal requirements, or are not subject to permitting requirements.

In addition to sources that have applicable requirements, this premises contains many small sources that have no specific applicable requirements. Such sources are often replaced, removed or added to the premises.

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 UNIT DESCRIPTION						
Emissions Units	Grouped Emissions Units	Emissions Unit Description	Size Rating/ Design Capacity	Control Unit Description	Monitoring Unit Description	Permit (P) or Regulation
EU-1		Nebraska Boiler #4, Model No. NS-F-89 (Central Power Plant)	129 MMBtu/hr	Low NOx burner w/Flue gas recirculation	CEMS for Opacity, NOx, and Oxygen	P 117-0210 40 CFR Part 60 Subpart Db 40 CFR Part 63 Subpart JJJJJ RCSA §22a-174-22
EU-2	GEU-11	Nebraska Boiler #5, Model No. NOS-3/S-75 (Central Power Plant)	121.4 MMBtu/hr	Low NOx burner w/Flue gas recirculation	CEMS for NOx and Oxygen	P 117-0371 40 CFR Part 60 Subpart Db 40 CFR Part 63 Subpart JJJJJ RCSA §22a-174-22
EU-3		Nebraska Boiler #6, Model No. NOS-3/S-75 (Central Power Plant)	121.4 MMBtu/hr	Low NOx burner w/Flue gas recirculation	CEMS for NOx and Oxygen	P 117-0372 40 CFR Part 60 Subpart Db 40 CFR Part 63 Subpart JJJJJ RCSA §22a-174-22
EU-4	GEU-1	General Electric Combustion Turbine and Duct Burner Heat Recovery Steam Generators, Model PGT-5/M, Cogeneration System #1 (Central Power Plant)	6.1 MW	SCR for NOx Low NOx burner Oxidation Catalyst for CO	CEMS for NOx and Oxygen	P 117-0204 40 CFR Part 60 Subpart Dc 40 CFR Part 60 Subpart GG RCSA §22a-174-22
EU-5		General Electric Combustion Turbine and Duct Burner Heat Recovery Steam Generators, Model PGT-5/M, Cogeneration System #2 (Central Power Plant)	6.1 MW	SCR for NOx Low NOx burner Oxidation Catalyst for CO	CEMS for NOx and Oxygen	P 117-0205 40 CFR Part 60 Subpart Dc 40 CFR Part 60 Subpart GG RCSA §22a-174-22
EU-6		General Electric Combustion Turbine and Duct Burner Heat Recovery Steam Generators, Model PGT-5/M; Cogeneration System #3 (Central Power Plant)	6.1 MW	SCR for NOx Low NOx burner Oxidation Catalyst for CO	CEMS for NOx and Oxygen	P 117-0206 40 CFR Part 60 Subpart Dc 40 CFR Part 60 Subpart GG RCSA §22a-174-22

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNIT DESCRIPTION, continued

Emissions Units	Grouped Emissions Units	Emissions Unit Description	Size Rating/ Design Capacity	Control Unit Description	Monitoring Unit Description	Permit, Order, Registration Number, or Federal Standard
EU-7	GEU-6	Mitsubishi Diesel Generator #1 Model No. S16R-PTA (Central Power Plant)	1500 kW	SCR for NO _x Oxidation Catalyst for CO	CEMS for NO _x and Oxygen	P 117-0207 40 CFR Part 63 Subpart ZZZZ RCSA §22a-174-22
EU-8		Mitsubishi Diesel Generator #2 Model No. S16R-PTA (Central Power Plant)	1500 kW	SCR for NO _x Oxidation Catalyst for CO	CEMS for NO _x and Oxygen	P 117-0208 40 CFR Part 63 Subpart ZZZZ RCSA §22a-174-22
EU-9		Mitsubishi Diesel Generator #3 Model No. S16R-PTA (Central Power Plant)	1500 kW	SCR for NO _x Oxidation Catalyst for CO	CEMS for NO _x and Oxygen	P 117-0209 40 CFR Part 63 Subpart ZZZZ RCSA §22a-174-22
EU-11		Onan Emergency Diesel Generator, Model No. NTA855A-G2 (17 Hillhouse Ave)	300 kW	None	None	P 117-0354 RCSA §22a-174-22
EU-21		Cummins 300 KW Diesel Emergency Generator, Model No. NTATA855G2 (Police Station)	300 kW	None	None	RCSA §22a-174-3b(e) RCSA §22a-174-22
EU-42	GEU-2	Cleaver Brooks Boiler Model No. CB700-200 (Divinity School)	8.369 MMBtu/hr	None	None	RCSA §22a-174-22
EU-43		Cleaver Brooks Boiler Model No. FLX (Divinity School)	9.0 MMBtu/hr	None	None	RCSA §22a-174-22
EU-197	GEU-8	Caterpillar Diesel Emergency Generator, Model No. 3516C (Central Power Plant)	2000 kW	None	None	RCSA §22a-174-3b(e) 40 CFR Part 60 Subpart III RCSA §22a-174-22
EU-200		Cummins Emergency Generator Model No. LTA-10G1 (1022 Chapel Street)	250 kW	None	None	RCSA §22a-174-3b(e)
EU-201	GEU-8	Cummins Emergency Generator Model No. QSX15-G9 (55 Lock Street)	500 kW	None	None	RCSA §22a-174-3b(e) 40 CFR Part 60 Subpart III RCSA §22a-174-22
EU-202		Cummins Emergency Generator Model No. DGFC-580102 (67-81 Howe Street)	200 kW	None	None	RCSA §22a-174-3b(e) 40 CFR Part 60 Subpart III

Section II: Emissions Units Information

B. OPERATING SCENARIO IDENTIFICATION

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

TABLE II.B: OPERATING SCENARIO IDENTIFICATION	
Emissions Units Associated with the Scenario	Description of Scenario
All emissions units listed in Section II.A, Table II.A of this Title V permit.	All emissions units shall be operated in accordance with applicable permit or regulation terms and conditions.

Section III: Applicable Requirements and Compliance Demonstration

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

A. EMISSIONS UNIT 1 (EU-1) (Nebraska Boiler, Model No. NS-F-89)

1. Fuel Consumption

a. Limitation or Restriction

The Permittee shall limit the maximum heat input of EU-1 to 1,130,040 MMBtu per consecutive 12 month period. The following equation establishes the corresponding maximum fuel consumption while allowing the flexibility of burning natural gas and No. 6 fuel oil:

$$X*(0.150 \text{ MMBtu/gal}) + Y*(0.001 \text{ MMBtu/ft}^3) = 1,130,040 \text{ MMBtu}$$

where,

X = gallons of No. 6 fuel oil, \leq 2.638 million gallons

Y = ft³ of natural gas, \leq 1,130.04 million ft³

[P 117-0210]

b. Monitoring and Testing Requirements

A fuel metering device shall be used to continuously monitor the total fuel feed to EU-1 in conjunction with EU-5 and EU-6. [P 117-0210]

c. Record Keeping Requirements

- i. The Permittee shall keep monthly and annual records of fuel consumption. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding (for each fuel) the current month's fuel usage to that of the previous 11 months. These calculations shall be made on a monthly basis. [P 117-0210]
- ii. The Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for oil and natural gas for the reporting period. The annual capacity factor is determined on a 12 month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR §60.49b(d)]

2. Maximum Sulfur Content

a. Limitation or Restriction

The Permittee shall burn only very low sulfur oil or natural gas. Very low sulfur oil means for units constructed, reconstructed, or modified on or before February 28, 2005, an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO₂ emission control, has a SO₂ emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input.

[P 117-0210; 40 CFR §60.41b; 40 CFR §60.42b(k)(2)]

Section III: Applicable Requirements and Compliance Demonstration

b. Monitoring and Testing Requirements

- i. Compliance with the fuel oil sulfur limit listed in Section III.A.1.a of this Title V permit shall be determined on a 30-day rolling average basis. [40 CFR §60.42b(e)]
- ii. The Permittee shall obtain fuel receipts for very low sulfur oil as specified in 40 CFR §60.49b(r) and as such is not subject to the percent reduction requirements in 40 CFR §60.42b, compliance and performance testing requirements of 40 CFR §60.45b, or the emissions monitoring requirements under 40 CFR §60.47b(a). [40 CFR §60.42b(j); 40 CFR §60.45b(j); 40 CFR §60.47b(f)]

c. Record Keeping Requirements

The Permittee shall keep records of each fuel oil shipment for this equipment and shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. Each shipping receipt and certification shall be kept on site. [P 117-0210]

d. Reporting Requirements

- i. The Permittee shall submit to the Administrator reports certifying that only very low sulfur oil, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period. Such reports shall contain the information required in Section III.A.2.b.ii of this Title V permit. [40 CFR §60.49b(r)(1)]
- ii. The Permittee may submit electronic quarterly reports for SO₂ in lieu of submitting the written reports required under 40 CFR §§60.49b(h) through (l). The format of each quarterly electronic report shall be coordinated with the commissioner. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60 Subpart Db was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with the commissioner to obtain their agreement to submit reports in this alternative format. [40 CFR §60.49b(v)]
- iii. The reporting period for the reports required under 40 CFR Part 60 Subpart Db is each six month period. All reports shall be submitted to the Administrator and/or the commissioner and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.49b(w)]

Section III: Applicable Requirements and Compliance Demonstration

3. Criteria Air Pollutants

a. Limitation or Restriction

- i. Emissions shall not exceed the following at any time when burning natural gas, except during startup, shutdown and routine maintenance, unless otherwise specified in this Title V permit:

<u>Pollutant</u>	<u>lb/hr</u>	<u>lb/MMBtu</u>	<u>tpy</u>
PM ₁₀	0.387	0.003	1.695
SO _x	0.129	0.001	0.565
NO _x	5.160	0.040	22.60
VOC	0.361	0.0028	1.582
CO	3.251	0.0252	14.24

[P 117-0210]

- ii. Emissions shall not exceed the following at any time when burning No. 6 fuel oil, except during startup, shutdown and routine maintenance, unless otherwise specified in this Title V permit:

<u>Pollutant</u>	<u>lb/hr</u>	<u>lb/MMBtu</u>	<u>tpy</u>
PM ₁₀	3.860	0.0317	6.35
SO _x	66.0	0.541	108.5
NO _x	30.50	0.250	50.20
VOC	0.365	0.003	0.600
CO	9.120	0.075	15.91

[P 117-0210]

- iii. Total annual emissions shall not exceed the following:

<u>Pollutant</u>	<u>tpy</u>
PM ₁₀	7.40
SO _x	108.9
NO _x	64.3
VOC	1.59
CO	23.9

[P 117-0210]

- iv. Total NO_x emissions from EU-1, GEU-1 and GEU-6 shall not exceed 121.5 tpy. [P 117-0210]

b. Monitoring and Testing Requirements

- i. The Permittee shall install, calibrate, maintain, operate, and certify CEMS for measuring NO_x and O₂ (or CO₂) emissions discharged to the atmosphere, and shall record the output of the system. The CEMS shall be calibrated, operated and tested in accordance with RCSA §22a-174-4(c)(4) and with the requirements specified in 40 CFR Part 60 Subpart A, Appendix B and Appendix F, as may be amended from time to time.

[40 CFR §60.48b(b)(1); RCSA §22a-174-22(k)(3); RCSA §22a-174-4(c)(4)]

- ii. The NO_x and O₂ CEMS shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR §60.48b(c)]

Section III: Applicable Requirements and Compliance Demonstration

- iii. The 1-hour average NO_x emission rates measured by the NO_x CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates given 40 CFR §60.44b. The 1-hour averages shall be calculated using the data points required in 40 CFR §60.13(h)(2). [40 CFR §60.48b(d)]
 - iv. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of Appendix A of 40 CFR Part 60, Method 7A of Appendix A of 40 CFR Part 60, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [40 CFR §60.48b(f)]
 - v. The NO_x standards under 40 CFR §60.44b(a) apply at all times including periods of startup, shutdown, or malfunction. [40 CFR §60.44b(h); 40 CFR §60.46b(a)]
 - vi. The averaging times shall be 24 hours rolling for the NO_x CEMS and 1-hour block for the O₂ CEMS and shall include all periods of operation, including startup, shutdown, and malfunction. As stated in Section III.A.3.a of this Title V Permit, emission limits do not apply during periods of startup, shutdown, and routine maintenance. [P 117-0210]
 - vii. The performance or quality assurance testing of the CEMS shall be conducted in accordance with a testing protocol approved by the commissioner. [RCSA §22a-174-22(k)(3)]
 - viii. The Permittee shall use data recorded by the NO_x CEMS and any other records and reports to determine compliance with NO_x emission limits in Section III.A.3.a of this Title V permit. [RCSA §22a-174-22(l)(8)]
 - ix. The Permittee shall comply with RCSA §22a-174-22 in accordance with the submitted compliance plan to the commissioner. [RCSA §22a-174-22(m)]
 - x. Demonstration of compliance with the emission limits in Section III.A.3.a of this Title V permit shall be met by calculating the emission rates using emission factors from the most current CEMS data, the most current DEEP approved stack test data, AP-42 or a mass balance. [RCSA §22a-174-33(j)(1)(K)(ii)]
 - xi. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with emission limits in Section III.A.3.a of this Title V permit, as allowed by state or federal statute, law or regulation. [P 117-0210]
- c. *Record Keeping Requirements*
- i. The Permittee shall submit to the Administrator and/or commissioner the performance evaluation of the CEMS using the applicable performance specifications in Appendix B of the 40 CFR Subpart 60. [40 CFR §60.49b(b)]
 - ii. The Permittee shall maintain records of the following information each steam generating unit operating day:
 - (a) Calendar date;

Section III: Applicable Requirements and Compliance Demonstration

- (b) The average hourly NO_x emission rates (expressed as NO₂) (ng/J or lb/MMBtu heat input) measured or predicted;
 - (c) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
 - (d) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under Section III.A.3.a of this Title V permit, with the reasons for such excess emissions as well as a description of corrective actions taken;
 - (e) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - (f) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - (g) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;
 - (h) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
 - (i) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
 - (j) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of 40 CFR Subpart 60. [40 CFR §60.49b(g)]
- iii. The Permittee shall keep monthly and annual records of all fuel used, continuous emissions monitoring, and operating hours. [RCSA §22a-174-22(l)(1)(C)]
 - iv. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance for EU-1. [RCSA §22a-174-22(l)(1)(D)]
 - v. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
 - vi. The Permittee shall keep all charts, electronically stored data, and printed records produced by the NO_x CEMS. [RCSA §22a-174-22(l)(1)(F)]
 - vii. The Permittee shall keep procedures for calculating NO_x emission rates. [RCSA §22a-174-22(l)(1)(G)]
 - viii. The Permittee shall keep records of all performance evaluations, calibration checks and adjustments on the NO_x CEMS; a record of maintenance procedures; and all data necessary to complete the quarterly reports required under Section III.A.3.d.v of this Title V permit. [RCSA §22a-174-22(l)(1)(I)]

Section III: Applicable Requirements and Compliance Demonstration

- ix. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(J)]
- x. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀, SO_x, NO_x, VOC, and CO emissions in units of tons for EU-1. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]
- xi. The Permittee shall maintain monthly and consecutive 12 month actual NO_x emissions from EU-1, GEU-1 and GEU-6 combined. The combined consecutive 12 month actual NO_x emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. The Permittee may submit electronic quarterly reports for NO_x in lieu of submitting the written reports required under 40 CFR §§60.49b(h) through (l). The format of each quarterly electronic report shall be coordinated with the commissioner. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60 Subpart Db was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with the commissioner to obtain their agreement to submit reports in this alternative format. [40 CFR §60.49b(v)]
- ii. The reporting period for the reports required under 40 CFR Part 60 Subpart Db is each six month period. All reports shall be submitted to the Administrator and/or the commissioner and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.49b(w)]
- iii. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting any performance or quality assurance testing of the NO_x CEMS. [RCSA §22a-174-22(k)(3)]
- iv. Within 60 days of the completion of certification tests conducted on the NO_x CEMS, the Permittee shall submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22(l)(3)]
- v. The Permittee shall submit to the commissioner written quarterly reports of excess emissions and CEMS malfunctions. Such reports shall be submitted to the commissioner on or before January 30, April 30, July 30, and October 30 and shall include data for the three calendar month period ending the month before the due date of the report. For each period of excess emissions, such report shall include the date and time of commencement and completion of such period, the magnitude and suspected cause of the excess emissions and all actions taken to correct the excess emissions. For each malfunction of the CEMS, such report shall include the date and time of when the malfunction commenced and ended, and all actions taken to correct the malfunction. [RCSA §22a-174-22(l)(4)]

Section III: Applicable Requirements and Compliance Demonstration

4. Opacity

a. Limitation or Restriction

When burning oil in EU-1, the Permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six minute average), except for one six minute period per hour of not more than 27 percent opacity. [40 CFR §60.43b(f)]

b. Monitoring and Testing Requirements

- i. Compliance with the opacity limit in Section III.A.4.a of this Title V permit shall be determined by conducting performance tests as required by the Administrator and/or the commissioner using the procedures and reference methods specified in 40 CFR §60.46b(d). [40 CFR §60.46b(d)]
- ii. Except as otherwise allowed by 40 CFR §60.48b(j), the Permittee shall install, calibrate, maintain, operate, and certify a COMS for measuring the opacity of emissions discharged to the atmosphere and record the output. The COMS shall be calibrated, operated and tested in accordance with RCSA §§22a-174-4(c)(3) & (c)(4) and with the requirements specified in 40 CFR Part 60 Subpart A, Appendix B and Appendix F, as may be amended from time to time. [40 CFR §60.48b(a); RCSA §22a-174-4(c)(3) & (c)(4)]
- iii. The opacity standards apply at all times, except during periods of startup, shutdown or malfunction. [40 CFR §60.43b(g); 40 CFR §60.46b(a); P 117-0210]

c. Record Keeping Requirements

- i. The Permittee shall submit to the Administrator and/or commissioner the performance evaluation of the COMS using the applicable performance specifications in Appendix B of the 40 CFR Subpart 60. [40 CFR §60.49b(b)]
- ii. The Permittee shall maintain records of opacity. [40 CFR §60.49b(f)]

d. Reporting Requirements

- i. The Permittee may submit electronic quarterly reports for opacity in lieu of submitting the written reports required under 40 CFR §§60.49b(h) through (l). The format of each quarterly electronic report shall be coordinated with the commissioner. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60 Subpart Db was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with the commissioner to obtain their agreement to submit reports in this alternative format. [40 CFR §60.49b(v)]
- ii. The reporting period for the reports required under 40 CFR Part 60 Subpart Db is each six month period. All reports shall be submitted to the Administrator and/or the commissioner and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.49b(w)]

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5. HAPs

a. Limitation or Restriction

- i. The allowable stack concentration of formaldehyde shall not exceed 6,112 ug/m³. [P 117-0210]
- ii. The allowable stack concentration of sulfuric acid shall not exceed 10,186 ug/m³. [P 117-0210]

b. Monitoring and Testing Requirements

The Permittee shall calculate the allowable stack concentration of formaldehyde and sulfuric acid using emission factors from the latest version of AP-42 or from a recent stack test.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records demonstrating compliance with the limitations in Section III.A.5.a of this Title V permit. If stack testing was used for calculating emissions, records of such stack test shall be kept. [RCSA §22a-174-33(j)(1)(K)(ii)]

6. 40 CFR Part 63 Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources [Federal]

a. Limitation or Restriction

- i. The Permittee shall demonstrate initial compliance with 40 CFR Part 63 Subpart JJJJJJ no later than March 21, 2014 and according to the applicable provisions in 40 CFR §63.7(a)(2), except as provided in 40 CFR §63.11210(j). (Boiler Classification: Existing oil-fired boiler at an area source with heat input capacity greater than 10 MMBtu/hr) [40 CFR §63.11210(c)]
- ii. The Permittee shall conduct an initial tune-up as specified in 40 CFR §63.11214, and conduct a tune-up of the boiler biennially as specified in 40 CFR §63.11223(b). The Permittee must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
[40 CFR §63.11201(b); Table 2, Condition 4 of 40 CFR Part 63 Subpart JJJJJJ; 40 CFR §63.11223(a)]
- iii. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 of 40 CFR Part 63 Subpart JJJJJJ satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement.
[40 CFR §63.11201(b); Table 2, Condition 16 of 40 CFR Part 63 Subpart JJJJJJ]

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b. Monitoring and Testing Requirements

The Permittee, at all times, shall operate and maintain this boiler in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by 40 CFR Part 63 Subpart JJJJJ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR §63.11205(a)]

c. Record Keeping Requirements

- i. The Permittee shall keep, as required in 40 CFR §63.10(b)(2)(xiv), a copy of each notification and report that is submitted to comply with 40 CFR Part 63 Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted. [40 CFR §63.11225(c)(1)]
- ii. The Permittee shall keep records that identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. [40 CFR §63.11225(c)(2)(i)]
- iii. The Permittee shall keep a copy of the energy assessment report. [40 CFR §63.11225(c)(2)(iii)]
- iv. The Permittee shall keep records of the occurrence and duration of each malfunction of the boiler. [40 CFR §63.11225(c)(4)]
- v. The Permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. [40 CFR §63.11225(c)(5)]

d. Reporting Requirements

- i. The Permittee shall prepare a biennial compliance certification report containing the information in 40 CFR §§63.11225(b)(1) and (2). This report shall be prepared by March 1 of each year and submitted to the delegated authority upon request. The report must be submitted by March 15 if there were any instances described in paragraph 40 CFR §63.11225(b)(3). [40 CFR §63.11225(b)]
- ii. The Permittee shall submit a signed statement in the Notification of Compliance Status report that indicates that the Permittee conducted a tune-up of the boiler. [40 CFR §63.11214(b)]
- iii. The Permittee shall submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 of 40 CFR Part 63 Subpart JJJJJ and is an accurate depiction of the Permittee's facility. [40 CFR §63.11214(c)]

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- iv. If the Permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within 40 CFR Part 63 Subpart JJJJJ, in the boiler becoming subject to 40 CFR Part 63 Subpart JJJJJ, or in the boiler switching out of 40 CFR Part 63 Subpart JJJJJ due to a change to 100 percent natural gas, or the Permittee has taken a permit limit that resulted in the Permittee being subject to 40 CFR Part 63 Subpart JJJJJ, the Permittee must provide notice of the date upon which the Permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:
 - (a) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice; and
 - (b) The date upon which the fuel switch, physical change, or permit limit occurred.

[40 CFR §63.11225(g)]

B. GROUPED EMISSIONS UNIT 11 (GEU-11 – EU-2 & EU-3) (Nebraska Boilers #5 & #6, Model Nos. NOS-3/S-75)

1. Fuel Consumption

a. Limitation or Restriction

Maximum annual fuel consumption for the units in GEU-11 combined shall not exceed 2,127 MMcf of natural gas and 1,471,740 gal of distillate oil. The use of a biodiesel blend (B5) is allowed as an alternative to distillate oil. [P 117-0371; P 117-0372]

b. Monitoring and Testing Requirements

The Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor fuel feed to GEU-11. [P 117-0371; P 117-0372]

c. Record Keeping Requirements

The Permittee shall record the monthly and consecutive 12 month fuel consumption for GEU-11. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P 117-0371; P 117-0372]

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

- i. The maximum fuel sulfur content shall not exceed 0.0015% by weight, dry basis.
[P 117-0371; P 117-0372]
- ii. The Permittee shall burn only very low sulfur oil or natural gas. Very low sulfur oil means for units constructed, reconstructed, or modified on or before February 28, 2005, an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO₂ emission control, has a SO₂ emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input.
[40 CFR §60.41b; 40 CFR §60.42b(k)(2)]

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b. Monitoring and Testing Requirements

- i. Compliance with the fuel oil sulfur limit listed in Section III.B.2.a.ii of this Title V permit shall be determined on a 30-day rolling average basis. [40 CFR §60.42b(e)]
- ii. The Permittee shall obtain fuel receipts for very low sulfur oil as specified in 40 CFR §60.49b(r) and as such is not subject to the percent reduction requirements in 40 CFR §60.42b, compliance and performance testing requirements of 40 CFR §60.45b, or the emissions monitoring requirements under 40 CFR §60.47b(a). [40 CFR §60.42b(j); 40 CFR §60.45b(j); 40 CFR §60.47b(f)]

c. Record Keeping Requirements

The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by GEU-11 that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P 117-0371; P 117-0372]

d. Reporting Requirements

- i. The Permittee shall submit to the Administrator reports certifying that only very low sulfur oil, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period. Such reports shall contain the information required in Section III.B.2.b.i of this Title V permit. [40 CFR §60.49b(r)(1)]
- ii. The Permittee may submit electronic quarterly reports for SO₂ in lieu of submitting the written reports required under 40 CFR §§60.49b(h) through (l). The format of each quarterly electronic report shall be coordinated with the commissioner. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60 Subpart Db was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with the commissioner to obtain their agreement to submit reports in this alternative format. [40 CFR §60.49b(v)]
- iii. The reporting period for the reports required under 40 CFR Part 60 Subpart Db is each six month period. All reports shall be submitted to the Administrator and/or the commissioner and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.49b(w)]

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3. Criteria Air Pollutants

a. Limitation or Restriction

- i. Emissions from each unit in GEU-011 shall not exceed the following at any time when burning natural gas, unless otherwise specified in this Title V permit:

<u>Pollutant</u>	<u>lb/hr</u>	<u>lb/MMBtu</u>
PM	0.92	--
PM ₁₀ /PM _{2.5}	0.92	--
SO _x	0.07	--
NO _x	1.34	0.011 ¹
VOC	0.67	--
CO	4.73	--

¹ The lb/MMBtu limit only applies during periods of operation at >25% of maximum rated capacity.

[P 117-0371; P 117-0372]

- ii. Emissions from each unit in GEU-011 shall not exceed the following at any time when burning oil, unless otherwise specified in this Title V permit:

<u>Pollutant</u>	<u>lb/hr</u>	<u>lb/MMBtu</u>
PM	2.81	--
PM ₁₀	1.96	--
PM _{2.5}	1.32	--
SO _x	0.21	--
NO _x	11.54	0.10 ¹
VOC	0.29	--
CO	9.23	--

¹ The lb/MMBtu limit only applies during periods of operation at >25% of maximum rated capacity.

[P 117-0371; P 117-0372]

- iii. Total annual emissions from all units in GEU-11 combined shall not exceed the following:

<u>Pollutant</u>	<u>tpy</u>
PM	9.8
PM ₁₀	9.0
PM _{2.5}	8.4
SO _x	0.8
NO _x	20.6
VOC	5.8
CO	45.4

[P 117-0371; P 117-0372]

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b. Monitoring and Testing Requirements

- i. The Permittee shall install, calibrate, maintain, operate, and certify CEMS for measuring NO_x and O₂ (or CO₂) emissions discharged to the atmosphere, and shall record the output of the system. The CEMS shall be calibrated, operated and tested in accordance with RCSA §22a-174-4(c)(4) and with the requirements specified in 40 CFR Part 60 Subpart A, Appendix B and Appendix F, as may be amended from time to time.
[40 CFR §60.48b(b)(1); RCSA §22a-174-22(k)(3); RCSA §22a-174-4(c)(4)]
- ii. The NO_x and O₂ CEMS shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR §60.48b(c)]
- iii. The 1-hour average NO_x emission rates measured by the NO_x CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates given 40 CFR §60.44b. The 1-hour averages shall be calculated using the data points required in 40 CFR §60.13(h)(2).
[40 CFR §60.48b(d)]
- iv. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of Appendix A of 40 CFR Part 60, Method 7A of Appendix A of 40 CFR Part 60, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [40 CFR §60.48b(f)]
- v. The NO_x standards under 40 CFR §60.44b(a) apply at all times including periods of startup, shutdown, or malfunction. [40 CFR §60.44b(h); 40 CFR §60.46b(a)]
- vi. The averaging times shall be 24 hour block for the NO_x CEMS and 1 hour block for the O₂ CEMS and shall include all periods of operation, including startup, shutdown, and malfunction. As stated in Section III.B.3.a of this Title V permit, the lb/MMBtu NO_x emission limits only apply during periods of operation greater than 25% of maximum rated capacity. [P 117-0371; P 117-0372]
- vii. The performance or quality assurance testing of the CEMS shall be conducted in accordance with a testing protocol approved by the commissioner. [RCSA §22a-174-22(k)(3)]
- viii. The Permittee shall use data recorded by the NO_x CEMS and any other records and reports to determine compliance with NO_x emission limits in Section III.B.3.a of this Title V permit.
[RCSA §22a-174-22(l)(8)]
- ix. The Permittee shall comply with RCSA §22a-174-22 in accordance with the submitted compliance plan to the commissioner. [RCSA §22a-174-22(m)]
- x. Demonstration of compliance with the emission limits in Section III.B.3.a of this Title V permit shall be met by calculating the emission rates using emission factors from the following sources:
 - NO_x (all fuels): CEMS
 - CO (all fuels): Manufacturer's Data
 - PM/PM₁₀/PM_{2.5} (natural gas): AP-42, 5th Edition, Vol. 1, Table 1.4-2

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- PM/ PM₁₀/PM_{2.5} (oil): AP-42, 5th Edition, Vol. 1, Table 1.3-2 and 1.3-6
- SO_x, VOC (natural gas): AP-42, 5th Edition, Vol. 1, Table 1.4-2
- SO_x (oil): AP-42, 5th Edition, Vol. 1, Table 1.3-1
- VOC (oil): AP-42, 5th Edition, Vol. 1, Table 1.3-3

[P 117-0371; P 117-0372]

- xi. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with emission limits in Section III.B.3.a of this Title V permit, as allowed by state or federal statute, law or regulation. [P 117-0371; P 117-0372]

c. Record Keeping Requirements

- i. The Permittee shall make and maintain records of all tune-ups, repairs, replacement of parts and other maintenance for GEU-11. [P 117-0371; P 117-0372; RCSA §22a-174-22(1)(D)]
- ii. The Permittee shall maintain all charts, electronically stored data and printed records produced by the continuous emissions monitoring system. The Permittee shall also maintain records of all performance evaluations, calibration checks and adjustment of the emissions monitor. [P 117-0371; P 117-0372]
- iii. The Permittee shall submit to the Administrator and/or commissioner the performance evaluation of the CEMS using the applicable performance specifications in Appendix B of the 40 CFR Subpart 60. [40 CFR §60.49b(b)]
- iv. The Permittee shall maintain records of the following information each steam generating unit operating day:
 - (a) Calendar date;
 - (b) The average hourly NO_x emission rates (expressed as NO₂) (ng/J or lb/MMBtu heat input) measured or predicted;
 - (c) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
 - (d) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under Section III.B.3.a of this Title V permit, with the reasons for such excess emissions as well as a description of corrective actions taken;
 - (e) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - (f) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

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- (g) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;
 - (h) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
 - (i) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
 - (j) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of 40 CFR Subpart 60. [40 CFR §60.49b(g)]
- v. The Permittee shall keep monthly and annual records of all fuel used, continuous emissions monitoring, and operating hours. [RCSA §22a-174-22(l)(1)(C)]
 - vi. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
 - vii. The Permittee shall keep all charts, electronically stored data, and printed records produced by the NO_x CEMS. [RCSA §22a-174-22(l)(1)(F)]
 - viii. The Permittee shall keep procedures for calculating NO_x emission rates. [RCSA §22a-174-22(l)(1)(G)]
 - ix. The Permittee shall keep records of all performance evaluations, calibration checks and adjustments on the NO_x CEMS; a record of maintenance procedures; and all data necessary to complete the quarterly reports required under Section III.B.3.d.v of this Title V permit. [RCSA §22a-174-22(l)(1)(I)]
 - x. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(J)]
 - xi. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM₁₀, PM_{2.5}, SO_x, NO_x, VOC, and CO emissions in units of tons for all units in GEU-11 combined. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month’s emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]
- d. *Reporting Requirements*
- i. The Permittee may submit electronic quarterly reports for NO_x in lieu of submitting the written reports required under 40 CFR §§60.49b(h) through (l). The format of each quarterly electronic report shall be coordinated with the commissioner. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60 Subpart Db was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with the commissioner to obtain their agreement to submit reports in this alternative format. [40 CFR §60.49b(v)]

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- ii. The reporting period for the reports required under 40 CFR Part 60 Subpart Db is each six month period. All reports shall be submitted to the Administrator and/or the commissioner and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.49b(w)]
- iii. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting any performance or quality assurance testing of the NO_x CEMS. [RCSA §22a-174-22(k)(3)]
- iv. Within 60 days of the completion of certification tests conducted on the NO_x CEMS, the Permittee shall submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22(l)(3)]
- v. The Permittee shall submit to the commissioner written quarterly reports of excess emissions and CEMS malfunctions. Such reports shall be submitted to the commissioner on or before January 30, April 30, July 30, and October 30 and shall include data for the three calendar month period ending the month before the due date of the report. For each period of excess emissions, such report shall include the date and time of commencement and completion of such period, the magnitude and suspected cause of the excess emissions and all actions taken to correct the excess emissions. For each malfunction of the CEMS, such report shall include the date and time of when the malfunction commenced and ended, and all actions taken to correct the malfunction. [P 117-0371; P 117-0372; RCSA §22a-174-22(l)(4)]

4. Opacity

a. *Limitation or Restriction*

- i. The units in GEU-11 shall not exceed 10% opacity during any six minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9. [P 117-0371; P 117-0372]
- ii. When burning oil in GEU-11, the Permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six minute average), except for one six minute period per hour of not more than 27 percent opacity [40 CFR §60.43b(f)]

b. *Monitoring and Testing Requirements*

The Permittee shall conduct visible emissions monitoring in accordance with one of the alternative methods and schedules allowed by 40 CFR §60.48b(a). [40 CFR §60.48b(a)]

c. *Record Keeping Requirements*

The Permittee shall maintain records according to the requirements specified in 40 CFR §§60.49b(f)(1) through (3) as applicable to the visible emissions monitoring method used. [40 CFR §60.49b(f)]

d. *Reporting Requirements*

- i. The Permittee may submit electronic quarterly reports for opacity in lieu of submitting the written reports required under 40 CFR §§60.49b(h) through (l). The format of each quarterly electronic report shall be coordinated with the commissioner. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60 Subpart Db was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with the

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commissioner to obtain their agreement to submit reports in this alternative format.
[40 CFR §60.49b(v)]

- ii. The reporting period for the reports required under 40 CFR Part 60 Subpart Db is each six month period. All reports shall be submitted to the Administrator and/or the commissioner and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.49b(w)]

5. 40 CFR Part 63 Subpart JJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources [Federal]

a. Limitation or Restriction

- i. The units in GEU-11 are not subject to the emission limits in Table 1 of 40 CFR Part 63 Subpart JJJJJ because the units in GEU-11 combust only oil that contains no more than 0.50 weight percent sulfur or other fuels not subject to a PM emission limit under 40 CFR Part 63 Subpart JJJJJ and do not use a post-combustion technology to reduce PM or SO₂ emissions. (Boiler Classification: New oil-fired boiler at an area source with heat input capacity greater than 10 MMBtu/hr)
[40 CFR §63.11210(e)]
- ii. The Permittee is not required to complete an initial performance tune-up, but the Permittee must complete the applicable biennial tune-up, for each unit in GEU-11, as specified in 40 CFR §63.11223 no later than 25 months after the initial startup of each unit in GEU-11.
[40 CFR §63.11210(f), Table 2, Condition 5 of 40 CFR Part 63 Subpart JJJJJ; 40 CFR 63.11223(a)]

b. Monitoring and Testing Requirements

The Permittee, at all times, shall operate and maintain the units in GEU-11 in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by 40 CFR Part 63 Subpart JJJJJ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR §63.11205(a)]

c. Record Keeping Requirements

- i. The Permittee shall keep, as required in 40 CFR §63.10(b)(2)(xiv), a copy of each notification and report that is submitted to comply with 40 CFR Part 63 Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted.
[40 CFR §63.11225(c)(1)]
- ii. The Permittee shall keep records that identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
[40 CFR §63.11225(c)(1)]
- iii. The Permittee shall keep records of the occurrence and duration of each malfunction of each boiler in GEU-11. [40 CFR §63.11225(c)(4)]

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- iv. The Permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. [40 CFR §63.11225(c)(5)]

d. Reporting Requirements

- i. The Permittee shall prepare a biennial compliance certification report containing the information in 40 CFR §§63.11225(b)(1) and (2). This report shall be prepared by March 1 of each year and submitted to the delegated authority upon request. The report must be submitted by March 15 if there were any instances described in paragraph 40 CFR §63.11225(b)(3). [40 CFR §63.11225(b)]
- ii. The Permittee shall submit a signed statement in the Notification of Compliance Status report that indicates that the Permittee conducted a tune-up of each boiler in GEU-11. [40 CFR §63.11214(b)]
- iii. If the Permittee has switched fuels or made a physical change to any boiler in GEU-11 and the fuel switch or change resulted in the applicability of a different subcategory within 40 CFR Part 63 Subpart JJJJJ, in any boiler in GEU-11 becoming subject to 40 CFR Part 63 Subpart JJJJJ, or in any boiler in GEU-11 switching out of 40 CFR Part 63 Subpart JJJJJ due to a change to 100 percent natural gas, or the Permittee has taken a permit limit that resulted in the Permittee being subject to 40 CFR Part 63 Subpart JJJJJ, the Permittee must provide notice of the date upon which the Permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:
 - (a) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice; and
 - (b) The date upon which the fuel switch, physical change, or permit limit occurred.[40 CFR §63.11225(g)]

C. GROUPED EMISSIONS UNIT 1 (GEU-1 – EU-4 through EU-6) (General Electric Combustion Turbine and Duct Burner Heat Recovery Steam Generators, Model PGT-5/M, Cogeneration System #1 through #3)

1. Fuel Consumption

a. Limitation or Restriction

- i. Maximum fuel consumption over any consecutive 12 month period shall not exceed 1,489,200 MMcf when operating solely on natural gas for each unit in GEU-1. [P 117-0204; P 117-0205; P 117-0206]
- ii. Maximum fuel consumption over any consecutive 12 month period shall not exceed 5,356,835 gallons when operating solely on No. 2 fuel oil for each unit in GEU-1. [P 117-0204; P 117-0205; P 117-0206]

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iii. Total heat input shall be limited by the following equation for each unit in GEU-1:

$$x \left(0.139 \frac{MMBtu}{gallon} \right) + y \left(0.001 \frac{MMBtu}{ft^3} \right) \leq 1,489,200 MMBtu$$

where,

x is the gallons of No. 2 fuel oil used over the previous 12 months; x shall not exceed 5,356,835 gallons

y is the cubic feet of natural gas used over the previous 12 months; y shall not exceed 1,489.2 MMcf

[P 117-0204; P 117-0205; P 117-0206]

b. Monitoring and Testing Requirements

i. The Permittee shall use a fuel metering device to continuously monitor fuel feed to each unit in GEU-1. [P 117-0204; P 117-0205; P 117-0206]

ii. The Permittee shall record and maintain records of the amounts of each fuel combusted during each calendar month for each unit in GEU-1. [40 CFR §60.48c(g)(2)]

c. Record Keeping Requirements

The Permittee shall keep records of monthly and consecutive 12 month fuel consumption for each unit in GEU-1. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.

[P 117-0204; P 117-0205; P 117-0206; 40 CFR §60.48c(g)(2)]

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

The maximum oil sulfur content shall not exceed 0.05% by weight, dry basis and applies at all times, including periods of startup, shutdown, and malfunction.

[P 117-0204; P 117-0205; P 117-0206; 40 CFR §60.42c(d); 40 CFR §60.42c(i); 40 CFR §60.333(b)]

b. Monitoring and Testing Requirements

i. The Permittee shall maintain a certification from the fuel oil supplier as described in Section III.C.2.c of this Title V permit. [40 CFR §60.42c(h)]

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- ii. The Permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR §60.331(u), regardless of whether an existing custom schedule approved by the Administrator for 40 CFR Part 60 Subpart GG requires such monitoring. The Permittee shall use one of the following sources of information to make the required demonstration:
 - (a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
 - (b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR Part 75 is required.

[40 CFR §60.334(h)(3)]
- iii. The Permittee shall determine the sulfur content of the fuel, as required in Sections III.C.2.b.ii and iii of this Title V permit, with the frequency specified in 40 CFR §60.334(i). [40 CFR §60.334(i)]

c. Record Keeping Requirements

- i. The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, the method used to determine the sulfur content of such fuel and a statement from the fuel supplier that the fuel complies with the specifications under the definition of distillate oil in 40 CFR §60.41c.
[P 117-0204; P 117-0205; P 117-0206; 40 CFR §60.48c(f)]
- ii. The Permittee shall keep records including the information in 40 CFR §§60.48c(e)(1) though (11) as applicable. [40 CFR §60.48c(e)]

d. Reporting Requirements

- i. The Permittee shall submit reports to the Administrator including the information recorded in Section III.C.2.c.ii of this Title V permit. The reporting period is each six-month period and such report shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.48c(e); 40 CFR §60.48c(j)]
- ii. The Permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR §60.7(c) to periodically determine the fuel sulfur content. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR §60.334(j). [40 CFR §60.334(j)]

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3. Criteria Air Pollutants

a. Limitation or Restriction

- i. The Permittee shall not cause or allow each unit in GEU-1 to exceed the following short term emission limits when operating on natural gas. These short term emission limits do not apply during periods of startup, shutdown and routine maintenance, unless otherwise noted.

<u>Pollutant</u>	<u>ppmvd @ 15% O₂</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM ₁₀ /PM _{2.5}	--	0.0204	2.78
SO ₂	--	0.0010	0.14
NO _x	6	0.0286	3.90
VOC/HC	--	0.0223	3.04
CO	--	0.0136	1.85

[P 117-0204; P 117-0205; P 117-0206]

- ii. The Permittee shall not cause or allow each unit in GEU-1 to exceed the following short term emission limits when operating on No. 2 fuel oil. These short term emission limits do not apply during periods of startup, shutdown and routine maintenance, unless otherwise noted.

<u>Pollutant</u>	<u>ppmvd @ 15% O₂</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM ₁₀ /PM _{2.5}	--	0.0417	5.40
SO ₂	--	0.052	6.74
NO _x	6	0.0289	3.74
VOC	--	0.0372	4.82
CO	--	0.0147	1.90

[P 117-0204; P 117-0205; P 117-0206]

- iii. Total emissions per 12 consecutive months shall not exceed the following for each unit in GEU-1:

<u>Pollutant</u>	<u>tpy</u>
PM ₁₀ /PM _{2.5}	15.0
SO ₂	19.7
NO _x	12.4
VOC	14.7
CO	5.1

[P 117-0204; P 117-0205; P 117-0206]

- iv. Total annual NO_x emissions from EU-1, GEU-1 and GEU-6, inclusively, shall not exceed 121.5 tons per year. [P 117-0204; P 117-0205; P 117-0206]

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b. Monitoring and Testing Requirements

- i. The Permittee shall install, calibrate, maintain, operate, and certify CEMS for measuring NO_x and O₂ emissions discharged to the atmosphere, and shall record the output of the system. The CEMS shall be calibrated, operated and tested in accordance with RCOSA §22a-174-4(c)(4) and with the requirements specified in 40 CFR Part 60 Subpart A, Appendix B and Appendix F as may be amended from time to time. [P 117-0204; P 117-0205; P 117-0206; RCOSA §22a-174-4(c)(4)]
- ii. The averaging times shall be 24 hours rolling for the NO_x CEMS and 1-hour block for the O₂ CEMS. [P 117-0204; P 117-0205; P 117-0206]
- iii. The Permittee shall continuously monitor and continuously record the oxidation catalyst inlet temperature (°F) for each unit in GEU-1. The Permittee shall maintain this parameter within the range recommended by the manufacturer to achieve compliance with the emission limits in Section III.C.3.a of this Title V permit. [P 117-0204; P 117-0205; P 117-0206]
- iv. The Permittee shall continuously monitor and continuously record the SCR aqueous ammonia injection rate (lb/hr), operating temperature (°F) and pressure drop (inches of water) across the catalyst bed for each unit in GEU-1. The Permittee shall maintain these parameters within the ranges recommended by the manufacturer to achieve compliance with the emission limits Section III.C.3.a of this Title V permit. [P 117-0204; P 117-0205; P 117-0206]
- v. The Permittee shall perform inspections of the SCR and oxidation catalysts as recommended by the manufacturer. [P 117-0204; P 117-0205; P 117-0206]
- vi. The Permittee shall operate and maintain the units in GEU-1 in accordance with the manufacturer's specifications and written recommendations. The Permittee shall operate and maintain the stationary combustion turbine/duct burner, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [P 117-0204; P 117-0205; P 117-0206]
- vii. The Permittee shall properly operate the control equipment at all times that the associated turbine/duct burners are in operation and emitting air pollutants. [P 117-0204; P 117-0205; P 117-0206]
- viii. The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints:
 - (a) Start the ammonia injection as soon as minimum catalyst temperature is reached;
 - (b) The oxidation catalyst will not be bypassed during startup or shutdown;
 - (c) The duration of startup shall not exceed 60 minutes for a hot start or a warm start, nor 240 minutes for a cold start. A hot start shall be defined as startup when the turbine has been down for less than 8 hours. A warm start shall be defined as startup when the turbine has been down for more than 8 hours. A cold start shall be defined as startup when the turbine has been down for more than 24 hours;
 - (d) The duration of shutdown shall not exceed 30 minutes; and
 - (e) Emissions during these periods shall be counted towards the annual emission limits in Section III.C.3.a.iii of this Title V permit.[P 117-0204; P 117-0205; P 117-0206]

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- ix. Recurrent stack testing for CO and VOC shall be conducted within five years from the date of the previous stack test to demonstrate compliance with their respective limits for each unit in GEU-1. Stack testing shall be performed in accordance with the latest Emission Test Guidelines available on the DEEP website.

Stack testing shall be conducted for the following operating modes: turbine and duct burner on natural gas; and turbine and duct burner on No. 2 fuel oil.

Stack test results shall be reported as follows: all pollutants in units of lb/hr and CO in units of ppmvd at 15% O₂.

[P 117-0204; P 117-0205; P 117-0206]

- x. Demonstration of compliance with the emission limits in Section III.C.3.a of this Title V permit shall be met by calculating the emission rates using emission factors from the following sources:
- NO_x: Most current CEMS data.
 - PM₁₀/PM_{2.5}, VOC, CO: Most current DEEP approved stack test data.
 - SO₂: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 3.1, April 2000 (turbine), Section 1.3, May 2010 (No. 2 fuel oil, duct burner) and Section 1.4, July 1998 (natural gas, duct burner).

[P 117-0204; P 117-0205; P 117-0206]

- xi. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with emission limits in Section III.C.3.a of this Title V permit, as allowed by state or federal statute, law or regulation. [P 117-0204; P 117-0205; P 117-0206]

c. *Record Keeping Requirements*

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀/PM_{2.5}, SO₂, NO_x, VOC, and CO emissions in units of tons for each unit in GEU-1. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. Emissions during startup and shutdown shall be counted towards the annual emission limitation in Section III.C.3.a.iii of this Title V permit. [P 117-0204; P 117-0205; P 117-0206]
- ii. The Permittee shall maintain monthly and consecutive 12 month actual NO_x emissions from EU-1, GEU-1 and GEU-6 combined. The combined consecutive 12 month actual NO_x emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P 117-0204; P 117-0205; P 117-0206; RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall keep records of all exceedances of any emissions limitation or operating parameter. Such records shall include:
- (a) the date and time of the exceedance;
 - (b) a detailed description of the exceedance; and
 - (c) the duration of the exceedance.

[P 117-0204; P 117-0205; P 117-0206]

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- iv. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of each of the units in GEU-1; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. Such records shall contain the following information:
 - (a) type of event (startup, shutdown, or malfunction);
 - (b) equipment affected;
 - (c) date of event;
 - (d) duration of event (minutes);
 - (e) fuel being used during event; and
 - (f) total NO_x emissions emitted (lb) during the event.[P 117-0204; P 117-0205; P 117-0206]
- v. The Permittee shall keep records of the inspection and maintenance of the SCR and oxidation catalysts. The records shall include the name of the inspector, the date, the results or actions and the date the catalyst is replaced. [P 117-0204; P 117-0205; P 117-0206]
- vi. The Permittee shall keep monthly and annual records of all fuel used, continuous emissions monitoring, and operating hours for each unit in GEU-1. [RCSA §22a-174-22(1)(1)(C)]
- vii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance for the units in GEU-1. [RCSA §22a-174-22(1)(1)(D)]
- viii. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(E)]
- ix. The Permittee shall keep all charts, electronically stored data, and printed records produced by the NO_x CEMS. [RCSA §22a-174-22(1)(1)(F)]
- x. The Permittee shall keep procedures for calculating NO_x emission rates. [RCSA §22a-174-22(1)(1)(G)]
- xi. The Permittee shall keep records of all performance evaluations, calibration checks and adjustments on the NO_x CEMS; a record of maintenance procedures; and all data necessary to complete the quarterly reports required under Section III.C.3.d.v of this Title V permit. [RCSA §22a-174-22(1)(1)(I)]
- xii. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(J)]
- xiii. The Permittee shall keep records of the dates, times, and places of all emission testing conducted, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an emissions limitation or operating parameter in Section III.C of this Title V permit, and shall identify the cause or likely cause of such exceedance, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

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- (a) For any hazardous air pollutant, no later than 24 hours after such exceedance commenced; and
- (b) For any other regulated air pollutant or operating parameter, no later than ten days after such exceedance commenced.

[P 117-0204; P 117-0205; P 117-0206]

- ii. The Permittee shall notify the commissioner in writing of any malfunction of any unit in GEU-1, the air pollution control equipment or the continuous monitoring system. The Permittee shall submit such notification within ten days of the malfunction. The notification shall include the following:
 - (a) a description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction; and
 - (b) a description of all corrective actions and preventive measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.

[P 117-0204; P 117-0205; P 117-0206]

- iii. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting any performance or quality assurance testing of the NO_x CEMS. [RCSA §22a-174-22(k)(3)]
- iv. Within 60 days of the completion of certification tests conducted on the NO_x CEMS, the Permittee shall submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22(l)(3)]
- v. The Permittee shall submit to the commissioner written quarterly reports of excess emissions and CEMS malfunctions. Such reports shall be submitted to the commissioner on or before January 30, April 30, July 30, and October 30 and shall include data for the three calendar month period ending the month before the due date of the report. For each period of excess emissions, such report shall include the date and time of commencement and completion of such period, the magnitude and suspected cause of the excess emissions and all actions taken to correct the excess emissions. For each malfunction of the CEMS, such report shall include the date and time of when the malfunction commenced and ended, and all actions taken to correct the malfunction. [RCSA §22a-174-22(l)(4)]

4. Ammonia

a. Limitation or Restriction

The Permittee shall not cause or allow each unit in GEU-1 to exceed 10 ppmvd @ 15% O₂ of ammonia when operating on natural gas or No. 2 fuel oil. This short term emission limit does not apply during periods of startup, shutdown and routine maintenance, unless otherwise noted.

[P 117-0204; P 117-0205; P 117-0206]

b. Monitoring and Testing Requirements

- i. Recurrent stack testing for ammonia shall be conducted within five years from the date of the previous stack test to demonstrate compliance with the limit in Section III.C.4.a of this Title V permit for each unit in GEU-1. Stack testing shall be performed in accordance with the latest Emission Test Guidelines available on the DEEP website.

Stack testing shall be conducted for the following operating modes: turbine and duct burner on natural gas; and turbine and duct burner on No. 2 fuel oil. Stack test results shall be reported in units of lb/hr and ppmvd at 15% O₂. [P 117-0204; P 117-0205; P 117-0206]

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- ii. Demonstration of compliance with the ammonia emission limit in Section III.C.4.a of this Title V permit shall be met by calculating the emission rates using emission factors from the most current DEEP approved stack test data. [P 117-0204; P 117-0205; P 117-0206]

c. *Record Keeping Requirements*

- i. The Permittee shall maintain records of stack tests performed pursuant to Section III.C.4.b.i of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall keep records of each delivery of aqueous ammonia. The records shall include the date of delivery, the name of the supplier, the quantity of aqueous ammonia delivered, and the percentage of ammonia in solution, by weight. [P 117-0204; P 117-0205; P 117-0206]

5. Opacity

a. *Limitation or Restriction*

The Permittee shall not cause to be discharged into the atmosphere from any unit in GEU-1 any gases that exhibit greater than 20 percent opacity over a six minute average, except for one six minute period per hour of not more than 27 percent opacity. This applies at all times, except during periods of startup, shutdown, or malfunction [40 CFR §60.43c(c); 40 CFR §60.43c(d)]

b. *Monitoring and Testing Requirements*

- i. If requested by the Administrator, the Permittee shall conduct performance tests to determine compliance with the opacity standard using the procedures and reference methods in 40 CFR §60.45c(a). [40 CFR §60.45c(a)]
- ii. The Permittee is not required to operate a COMS for the units in GEU-1 if the Permittee complies with Section III.C.2.c of this Title V permit. [40 CFR §60.47c(c)]

c. *Record Keeping Requirements*

The Permittee shall maintain records according to the requirements specified in 40 CFR §§60.48c(c)(1) through (3) as applicable to the visible emissions monitoring method used. [40 CFR §60.48c(c)]

d. *Reporting Requirements*

- i. The Permittee shall submit to the Administrator the performance test data from any performance tests conducted under Section III.C.5.b.i of this Title V permit. The reporting period is each six-month period and such report shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.48c(b); 40 CFR §60.48c(j)]
- ii. The Permittee shall submit excess emission reports for any excess emissions from any unit in GEU-1 that occurs during the reporting period, in addition to the applicable requirements in 40 CFR §60.7. The reporting period is each six-month period and such report shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR §60.48c(c); 40 CFR §60.48c(j)]

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D. GROUPED EMISSIONS UNIT 6 (GEU-6 – EU-7 through EU-9) (Mitsubishi Diesel Generator Model No. S16R-PTA, #1 through #3)

1. Fuel Consumption

a. Limitation or Restriction

Maximum No. 2 fuel oil consumption over any consecutive 12 month period shall not exceed 295,000 gallons for each unit in GEU-6. [P 117-0207; P 117-0208; P 117-0209]

b. Monitoring and Testing Requirements

The Permittee shall continuously monitor fuel consumption for each unit in GEU-6 using a fuel meter. [P 117-0207; P 117-0208; P 117-0209]

c. Record Keeping Requirements

The Permittee shall keep records of monthly and consecutive 12 month fuel consumption for each unit in GEU-6. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption for each unit in GEU-6 to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P 117-0207; P 117-0208; P 117-0209]

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

The maximum oil sulfur content shall not exceed 0.05% by weight, dry basis. [P 117-0207; P 117-0208; P 117-0209]

b. Monitoring and Testing Requirements

The Permittee shall maintain a certification from the fuel supplier as described in Section III.D.2.c of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P 117-0207; P 117-0208; P 117-0209]

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3. Criteria Air Pollutants

a. Limitation or Restriction

- i. The Permittee shall not cause or allow each unit in GEU-6 to exceed the following short term emission limits. The short term emission limits do not apply during periods of startup, shutdown and routine maintenance, unless otherwise noted.

<u>Pollutant</u>	<u>lb/hr</u>	<u>lb/MMBtu</u>
PM ₁₀ /PM _{2.5}	1.46	--
SO _x	0.85	--
NO _x	5.30	0.323
VOC/HC	0.25	--
CO	1.01	--

[P 117-0207; P 117-0208; P 117-0209]

- ii. Total emissions per 12 consecutive months shall not exceed the following for each unit in GEU-6:

<u>Pollutant</u>	<u>tpy</u>
PM ₁₀ /PM _{2.5}	1.70
SO _x	1.06
NO _x	6.63
VOC/HC	0.32
CO	1.25

[P 117-0207; P 117-0208; P 117-0209]

- iii. Total annual NO_x emissions from EU-1, GEU-1 and GEU-6, inclusively, shall not exceed 121.5 tons per year. [P 117-0207; P 117-0208; P 117-0209]

b. Monitoring and Testing Requirements

- i. The Permittee shall install, calibrate, maintain, operate, and certify CEMS for measuring NO_x and O₂ emissions discharged to the atmosphere, and shall record the output of the system. The Permittee shall comply with the CEMS requirements set forth in RCSA §22a-174-4.

[P 117-0207; P 117-0208; P 117-0209; RCSA §22a-174-4]

- ii. The averaging times shall be 24 hour block for the NO_x CEMS and 1-hour block for the O₂ CEMS.

[P 117-0207; P 117-0208; P 117-0209]

- iii. The Permittee shall continuously monitor and continuously record the SCR aqueous ammonia injection rate (lb/hr or gal/hr), operating temperature (°F) and the pressure drop (inches of water) across the catalyst bed. The Permittee shall maintain these parameters within the ranges recommended by the manufacturer to achieve compliance with the emission limits in Section III.D.3.a of this Title V permit. [P 117-0207; P 117-0208; P 117-0209]

- iv. The Permittee shall continuously monitor and continuously record the oxidation catalyst inlet temperature (°F). The Permittee shall maintain this parameter within the ranges recommended by the manufacturer to achieve compliance with the emission limits in this Title V permit.

[P 117-0207; P 117-0208; P 117-0209]

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- v. The Permittee shall perform inspections of the control devices as recommended by the manufacturer. [P 117-0207; P 117-0208; P 117-0209]
- vi. The Permittee shall operate and maintain the units in GEU-6 in accordance with the manufacturer's specifications and written recommendations. [P 117-0207; P 117-0208; P 117-0209]
- vii. The Permittee shall properly operate the control equipment at all times that the units in GEU-6 are in operation and emitting air pollutants. [P 117-0207; P 117-0208; P 117-0209]
- viii. The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints:
- (a) Start the ammonia injection as soon as minimum catalyst temperature is reached;
 - (b) The oxidation catalyst will not be bypassed during startup or shutdown;
 - (c) The duration of startup shall not exceed 60 minutes for a hot start or a warm start, nor 240 minutes for a cold start. A hot start shall be defined as startup when the turbine has been down for less than 8 hours. A warm start shall be defined as startup when the turbine has been down for more than 8 hours. A cold start shall be defined as startup when the turbine has been down for more than 24 hours;
 - (d) The duration of shutdown shall not exceed 30 minutes; and
 - (e) Emissions during these periods shall be counted towards the annual emission limits in Section III.D.3.a.ii of this Title V permit. [P 117-0207; P 117-0208; P 117-0209]
- ix. Demonstration of compliance with the emission limits in Section III.D.3.a of this Title V permit shall be met by calculating the emission rates using emission factors from the following sources:
- NO_x: Most current CEMS data.
 - PM₁₀/PM_{2.5}, CO: Most current DEEP approved stack test data.
 - VOC/HC: Manufacturer's data.
 - SO₂: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 3.4, October 1996.
- [P 117-0207; P 117-0208; P 117-0209]
- x. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with emission limits in Section III.D.3.a of this Title V permit, as allowed by state or federal statute, law or regulation. [P 117-0207; P 117-0208; P 117-0209]
- xi. The commissioner may use data recorded by the NO_x CEMs and any other records and reports to determine compliance with applicable requirements of RCSA §22a-174-22. [RCSA §22a-174(l)(8)]

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c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀/PM_{2.5}, SO₂, NO_x, VOC, and CO emissions in units of tons for each unit in GEU-6. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. Emissions during startup and shutdown shall be counted towards the annual emission limitation in Section III.D.3.a.ii of this Title V permit. [P 117-0207; P 117-0208; P 117-0209]
- ii. The Permittee shall maintain monthly and consecutive 12 month actual NO_x emissions from EU-1, GEU-1 and GEU-6 combined. The combined consecutive 12 month actual NO_x emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P 117-0207; P 117-0208; P 117-0209; RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of each of the units in GEU-6; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. Such records shall contain the following information:
 - (a) type of event (startup, shutdown, or malfunction);
 - (b) equipment affected;
 - (c) date of event;
 - (d) duration of event (minutes);
 - (e) fuel being used during event; and
 - (f) total NO_x emissions emitted (lb) during the event.[P 117-0207; P 117-0208; P 117-0209]
- iv. The Permittee shall keep records of the inspection and maintenance of the SCR and oxidation catalysts. The records shall include the name of the inspector, the date, the results or actions and the date the catalyst is replaced. [P 117-0207; P 117-0208; P 117-0209]
- v. The Permittee shall keep monthly and annual records of all fuel used, continuous emissions monitoring, and operating hours for each unit in GEU-6. [RCSA §22a-174-22(l)(1)(C)]
- vi. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance for the units in GEU-6. [RCSA §22a-174-22(l)(1)(D)]
- vii. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
- viii. The Permittee shall keep all charts, electronically stored data, and printed records produced by the NO_x CEMS. [RCSA §22a-174-22(l)(1)(F)]
- ix. The Permittee shall keep procedures for calculating NO_x emission rates. [RCSA §22a-174-22(l)(1)(G)]

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- x. The Permittee shall keep records of all performance evaluations, calibration checks and adjustments on the NO_x CEMS; a record of maintenance procedures; and all data necessary to complete the quarterly reports required under Section III.D.6.d.iii of this Title V permit. [RCSA §22a-174-22(l)(1)(I)]
- xi. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(J)]

d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting any performance or quality assurance testing of any such monitor. [RCSA §22a-174-22(k)(3)]
- ii. Within 60 days of the completion of certification tests conducted on the NO_x CEMS, the Permittee shall submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22(l)(3)]
- iii. The Permittee shall submit to the commissioner written quarterly reports of excess emissions and CEMS malfunctions. Such reports shall be submitted to the commissioner on or before January 30, April 30, July 30, and October 30 and shall include data for the three calendar month period ending the month before the due date of the report. For each period of excess emissions, such report shall include the date and time of commencement and completion of such period, the magnitude and suspected cause of the excess emissions and all actions taken to correct the excess emissions. For each malfunction of the CEMS, such report shall include the date and time of when the malfunction commenced and ended, and all actions taken to correct the malfunction. [RCSA §22a-174-22(l)(4)]

4. Ammonia

a. Limitation or Restriction

The Permittee shall not cause or allow each unit in GEU-6 to exceed 10 ppmvd @ 15% O₂ of ammonia. This short term emission limit does not apply during periods of startup, shutdown and routine maintenance, unless otherwise noted. [P 117-0207; P 117-0208; P 117-0209]

b. Monitoring and Testing Requirements

Demonstration of compliance with the ammonia emission limit in Section III.D.4.a of this Title V permit shall be met by calculating the emission rates using emission factors from the most current DEEP approved stack test data. [P 117-0207; P 117-0208; P 117-0209]

c. Record Keeping Requirements

The Permittee shall keep records of each delivery of aqueous ammonia. The records shall include the date of delivery, the name of the supplier, the quantity of aqueous ammonia delivered, and the percentage of ammonia in solution, by weight. [P 117-0207; P 117-0208; P 117-0209]

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5. 40 CFR Part 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [Federal]

The Permittee shall comply with Section III.D.5 of this Title V permit and any other applicable requirements of 40 CFR Part 63 Subpart ZZZZ by May 3, 2013. (Engine Classification: Existing Non-Emergency Compression Ignition RICE greater than 500 HP constructed before June 12, 2006 at an area source)

a. Limitation or Restriction

- i. For each unit in GEU-6, CO emissions shall not exceed 23 ppmvd @ 15% O₂ or the Permittee shall reduce CO emissions by 70% or more.
[40 CFR §63.6603(a); 40 CFR Part 63 Subpart ZZZZ, Table 2d]
- ii. The Permittee shall maintain the oxidation catalyst for each unit in GEU-6 so that the pressure drop across each catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test.
[40 CFR §63.6603(a); 40 CFR Part 63 Subpart ZZZZ, Table 2b]
- iii. The Permittee shall maintain the temperature of the exhaust for each unit in GEU-6 so that the oxidation catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. The Permittee may petition the Administrator pursuant to the requirements of 40 CFR §63.8(f) for operating within a different temperature range.
[40 CFR §63.6603(a); 40 CFR Part 63 Subpart ZZZZ, Table 2b]

b. Monitoring and Testing Requirements

- i. The Permittee shall, at all times, operate and maintain GEU-6, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by 40 CFR Part 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR §63.6605(b)]
- ii. The Permittee shall operate and maintain the oxidation catalyst inlet temperature CPMS according to the requirements in 40 CFR §§63.6625(b)(1) through (6). [40 CFR §63.6625(b)]
- iii. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations in Section III.D.5.a.i of this Title V permit apply.
[40 CFR §63.6625(h); 40 CFR Part 63 Subpart ZZZZ, Table 2d]
- iv. The Permittee shall monitor and collect data according to 40 CFR §63.6635. [40 CFR §63.6635(a)]
- v. The Permittee shall conduct performance tests for CO every 8,760 hours or 3 years, whichever comes first to demonstrate that each unit in GEU-6 complies with Section III.D.5.a.i of this Title V permit.
[40 CFR §63.6640(a); 40 CFR Part 63 Subpart ZZZZ, Tables 3 & 6]

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- vi. The Permittee shall collect the catalyst inlet temperature data according to 40 CFR §63.6625(b) and reducing this data to 4-hour rolling averages. The Permittee shall maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature. [40 CFR §63.6640(a); 40 CFR Part 63 Subpart ZZZZ, Table 6]
 - vii. The Permittee shall measure the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. [40 CFR §63.6640(a); 40 CFR Part 63 Subpart ZZZZ, Table 6]
 - viii. The Permittee shall reestablish the values of the operating parameters measured during the initial performance test if the oxidation catalyst is changed. When the Permittee reestablishes the values of the operating parameters, the Permittee must also conduct a performance test to demonstrate that the Permittee is meeting the emission limitation in Section III.D.5.a.i of this Title V permit. [40 CFR §63.6640(b)]
 - ix. The Permittee shall comply with any monitoring or testing requirements of the General Provisions listed in 40 CFR Part 63 Subpart ZZZZ, Table 8 that apply. [40 CFR §63.6665]
- c. *Record Keeping Requirements*
- i. The Permittee must keep a copy of each notification and report that was submitted to comply with 40 CFR Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv). [40 CFR §63.6655(a)(1)]
 - ii. The Permittee shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR §63.6655(a)(2)]
 - iii. The Permittee shall keep records of performance tests and performance evaluations as required in 40 CFR §63.10(b)(2)(viii). [40 CFR §63.6655(a)(3)]
 - iv. The Permittee shall keep records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR §63.6655(a)(4)]
 - v. The Permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR §63.6655(a)(5)]
 - vi. The Permittee shall keep the following records for the oxidation catalyst inlet temperature CPMS:
 - (a) Records described in 40 CFR §§63.10(b)(2)(vi) through (xi);
 - (b) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR §63.8(d)(3); and
 - (c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR §63.8(f)(6)(i), if applicable.[40 CFR §63.6655(b)]

Section III: Applicable Requirements and Compliance Demonstration

- vii. The Permittee shall keep records of the catalyst inlet temperature and pressure drop across the catalyst as required to be monitored in Sections III.D.5.b.vi and vii of this Title V permit. [40 CFR §63.6655(d)]
- viii. The Permittee shall comply with any record keeping requirements of the General Provisions listed in 40 CFR Part 63 Subpart ZZZZ, Table 8 that apply. [40 CFR §63.6665]

d. Reporting Requirements

- i. The Permittee must report each instance in which the Permittee did not meet each emission limitation or operating limitation in Section III.D.5.a of this Title V permit. These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in 40 CFR §63.6650. [40 CFR §63.6640(b)]
- ii. The Permittee must submit all notifications as required in 40 CFR §63.6645. [40 CFR §63.6645]
- iii. The Permittee shall submit semi-annual compliance reports according to the requirements specified in 40 CFR §63.6650(b) and shall contain the information in 40 CFR §§63.6650(c)(1) through (6). [40 CFR §§63.6650(b) and (c); 40 CFR Part 63 Subpart ZZZZ, Table 7]
- iv. The Permittee shall comply with any reporting requirements of the General Provisions listed in 40 CFR Part 63 Subpart ZZZZ, Table 8 that apply. [40 CFR §63.6665]

E. EMISSIONS UNIT 11 (EU-11)

(Onan Emergency Diesel Generator Set Model No: NTA855A-G2)

1. Fuel Consumption

a. Limitation or Restriction

Maximum diesel fuel oil consumption over any consecutive 12 month period shall not exceed 3,525 gallons. [P 117-0354]

b. Monitoring and Testing Requirements

When more than one fuel supply tank is to service this source or when multiple sources are supplied by one fuel tank, the Permittee shall use a fuel metering device to continuously monitor fuel feed to this permitted source. [P 117-0354]

c. Record Keeping Requirements

The Permittee shall keep records of annual operating hours and fuel consumption. Annual operating hours and fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding (for each fuel) the current month's fuel usage and operating hours to that of the previous 11 months. The Permittee shall make these calculations monthly. [P 117-0354]

Section III: Applicable Requirements and Compliance Demonstration

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

The maximum diesel sulfur content shall not exceed 0.05% by weight, dry basis. [P 117-0354]

b. Monitoring and Testing Requirements

Each oil fuel shipment for EU-11 shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. [P 117-0354]

c. Record Keeping Requirements

The Permittee shall maintain records of each shipping receipt and certification as specified in Section III.E.2.b of this Title V permit. [P 117-0354]

3. Criteria Air Pollutants

a. Limitation or Restriction

i. Emissions shall not exceed the following:

<u>Pollutant</u>	<u>lb/hr</u>	<u>lb/MMBtu</u>	<u>tpy</u>
PM ₁₀	0.293	0.090	0.022
SO _x	0.164	0.050	0.012
NO _x	9.08	2.790	0.680
VOC	0.065	0.020	0.005
CO	1.24	0.38	0.092

[P 117-0354]

b. Monitoring and Testing Requirements

i. Demonstration of compliance with the emission limits in Section III.E.3.a of this Title V permit shall be met by calculating the emission rates using emission factors from the following sources:

- Manufacturer's guaranteed test results

[P 117-0354]

ii. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with emission limits in Section III.E.3.a of this Title V permit, as allowed by state or federal statute, law or regulation. [P 117-0354]

iii. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [P 117-0354]

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀, SO_x, NO_x, VOC, and CO emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall keep daily records of operating hours of EU-11, identifying the operating hours of emergency and non-emergency use. [RCSA §22a-174-22(1)(1)(A)]
- iii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance for EU-11. [RCSA §22a-174-22(1)(1)(D)]
- iv. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(E)]
- v. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(J)]

d. Reporting Requirements

The Permittee shall submit a report on NO_x emissions from this stationary source on a form provided by the commissioner, on or before April 15 of each year. [RCSA §22a-174-22(1)(6)]

4. HAPs

a. Limitation or Restriction

Emissions shall not exceed the following:

<u>Pollutant</u>	<u>MASC</u> <u>(ug/m³)</u>
Sulfuric Acid	282
Formaldehyde	169

[P 117-0354]

b. Monitoring and Testing Requirements

The Permittee shall calculate the ASC and MASC of each HAP listed in Section III.E.4.a of this Title V permit. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in Section III.E.4.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

5. Emergency Operation

a. Limitation or Restriction

This equipment must be dedicated solely to responding in emergency situations. [P 117-0354]

b. Monitoring and Testing Requirements

- i. For EU-11, emergency means an unforeseeable occurrence or condition that is beyond the Permittee's control, and that:
 - (a) results in an interruption of electrical power from the supplying electrical utility to the subject premise;
 - (b) results in a deviation in the voltage to the subject premise of greater than three percent above or five percent below the standard nominal voltage specified by the supplying electrical utility in accordance with RCSA §16-11-115(a);
 - (c) requires an interruption of electrical power from the supplying electrical utility to the subject premise to enable the Permittee to perform emergency repairs; or
 - (d) requires operation of the subject emergency engine to minimize damage from fire, flood waters, or other conditions resulting from such emergency.

[P 117-0354]

- ii. For EU-11, an emergency engine is defined as a new or existing stationary reciprocating engine or turbine engine which is used as a means of providing mechanical or electrical power only during periods of routine testing and scheduled maintenance or during an emergency. Emergency engine does not include an engine with respect to which the Permittee is party to an agreement to sell electrical power from such engine to an electrical utility, or receives any reduction in the cost of electrical power for agreeing to supply electrical power from such engine during periods of reduced voltage or reduced power availability. [P 117-0354]
- iii. The Permittee shall not conduct routine scheduled testing or maintenance of EU-11 during days when ambient ozone is forecasted by the commissioner to be moderate to unhealthful, unhealthful, or very unhealthful.

The Permittee shall be exempt from this requirement if all of the following conditions are met:

- (a) the subject engine is unattended;
- (b) the schedule for routine testing or maintenance of such engine is automated and cannot be modified from a remote location; and
- (c) if a Permittee operates more than one emergency engine at the subject premise, the schedule for routine testing or maintenance of all such emergency engines does not call for the routine testing or maintenance of more than one such engine on the same day.

[P 117-0354]

c. Record Keeping Requirements

The Permittee shall maintain records of the date and type of emergency during which EU-11 is operated. Such records shall be maintained where the authorized activity takes place or at such other place as the commissioner approves in writing. [P 117-0354]

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F. EMISSIONS UNIT 21 (EU-21)

(Cummins 300 KW Diesel Emergency Generator Model No.: NTATA855G2 [Police Station])

1. Maximum Operating Hours

a. Limitation or Restriction

Maximum operating hours shall not be greater than 300 hours during any 12 month rolling aggregate and the engine shall be operated only during periods of testing and scheduled maintenance or during an emergency as defined in RCSA §22a-174-22. [RCSA §22a-174-3b(e)(2)(C)]

b. Monitoring and Testing Requirements

The Permittee shall monitor hours of operation on a monthly basis. [RCSA §22a-174-3b(e)(4)]

c. Record Keeping Requirements

- i. The Permittee shall maintain records of hours of operation on a monthly basis and a 12 month rolling aggregate. Maximum annual operating hours shall be based on any consecutive 12 month time period and shall be determined by adding each month's operating hours to that of the previous 11 months. [RCSA §22a-174-3b(e)(4)]
- ii. The Permittee shall keep daily records of operating hours of EU-21, identifying the operating hours of emergency and non-emergency use. [RCSA §22a-174-22(1)(1)(A)]
- iii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance for EU-21. [RCSA §22a-174-22(1)(1)(D)]
- iv. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(E)]
- v. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(J)]

d. Reporting Requirements

The Permittee shall submit a report on NO_x emissions from this stationary source on a form provided by the commissioner, on or before April 15 of each year. [RCSA §22a-174-22(1)(6)]

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

The Permittee shall not exceed the sulfur content of motor vehicle diesel fuel where "motor vehicle diesel fuel" is defined as in RCSA §22a-174-42 for any non-gaseous fuel consumed by EU-21. [RCSA §22a-174-3b(e)(2)(D)]

b. Monitoring Requirements

The Permittee shall monitor the sulfur content for the fuel burned by keeping the records specified in Section III.F.2.c of this Title V permit. [RCSA §22a-174-3b(e)(3)]

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c. *Record Keeping Requirements*

The Permittee shall keep any of the following records to demonstrate compliance with Section III.F.2.a of this Title V permit:

- i. A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;
- ii. A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
- iii. 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.

[RCSA §22a-174-3b(h)]

G. GROUPED EMISSIONS UNIT 2 (GEU-2, EU-42 and EU-43) (Cleaver Brooks Boiler Model No. CB700-200 and Cleaver Brooks Boiler Model No. FLX [Divinity School])

1. NO_x

a. *Limitation or Restriction*

NO_x emissions for each unit in GEU-2 shall not exceed 0.20 lb/MMBtu when burning natural gas or No. 2 fuel oil. [RCSA §22a-174-22(e)(1)]

b. *Monitoring and Testing Requirements*

The Permittee shall conduct emission testing once every five years from the date of the previous test or five years from the date the previous test was due, whichever is earlier for each unit in GEU-2. Each such emission test shall be conducted in accordance with RCSA §22a-174-5. Compliance with the emission limitations of Section III.G.1.a of this Title V permit shall be determined based on the average of three one-hour tests, each performed over a consecutive 60-minute period. Any analysis of nitrogen content conducted as part of such emission testing shall be in accordance with Method D-3228 of the American Society for the Testing of Materials. If the commissioner determines that three one-hour tests are not reasonable given the location, configuration or operating conditions of a stationary source, the commissioner may approve testing where compliance with the emission limitations of Section III.G.1.a of this Title V permit shall be determined based on the average of four 15-minute tests, each performed over a consecutive 15-minute period. The Permittee shall demonstrate compliance using sampling and analytical procedures as required by RCSA §22a-174-22(k)(2). [RCSA §§22a-174-22(k)(1) and (2)]

c. *Record Keeping Requirements*

- i. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance for each unit in GEU-2. [RCSA §22a-174-22(l)(1)(D)]
- ii. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
- iii. The Permittee shall keep records of the dates, times, and places of all emission testing required by Section III.G.1.b of this Title V permit, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing.

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[RCSA §22a-174-22(l)(1)(H)]

- iv. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(J)]

d. Reporting Requirements

- i. Within 30 days of the completion of emission tests conducted under the requirements of Section III.G.1.b of this Title V permit, the Permittee shall submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22(l)(2)]

**H. GROUPED EMISSIONS UNIT 8 (GEU-8 - EU-197 and EU-201)
(Caterpillar Diesel Emergency Generator, Model No. 3516C [CPP] and Cummins Emergency Generator Model No. QSX15-G9 [Lock St.]**

1. Maximum Operating Hours

a. Limitation or Restriction

Maximum operating hours from each engine in GEU-8 shall not be greater than 300 hours during any 12 month rolling aggregate and each engine shall be operated only during periods of testing and scheduled maintenance or during an emergency as defined in RCSA §22a-174-22. [RCSA §22a-174-3b(e)(2)(C)]

b. Monitoring and Testing Requirements

The Permittee shall monitor hours of operation of each unit in GEU-8 on a monthly basis. [RCSA §22a-174-3b(e)(4)]

c. Record Keeping Requirements

- i. The Permittee shall maintain records of hours of operation on a monthly basis and a 12 month rolling aggregate for each unit in GEU-8. Maximum annual operating hours for each unit in GEU-8 shall be based on any consecutive 12 month time period and shall be determined by adding each month's operating hours to that of the previous 11 months. [RCSA §22a-174-3b(e)(4)]
- ii. The Permittee shall keep daily records of operating hours of each unit in GEU-8, identifying the operating hours of emergency and non-emergency use. [RCSA §22a-174-22(l)(1)(A)]
- iii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance for each unit in GEU-8. [RCSA §22a-174-22(l)(1)(D)]
- iv. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
- v. The Permittee shall keep any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(J)]

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d. Reporting Requirements

The Permittee shall submit a report on NO_x emissions from each unit in GEU-8 on a form provided by the commissioner, on or before April 15 of each year. [RCSA §22a-174-22(1)(6)]

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

The Permittee shall not exceed the sulfur content of motor vehicle diesel fuel where “motor vehicle diesel fuel” is defined as in RCSA §22a-174-42 for any non-gaseous fuel consumed by each unit in GEU-8. [RCSA §22a-174-3b(e)(2)(D)]

b. Monitoring Requirements

The Permittee shall monitor the sulfur content for the fuel burned by keeping the records specified in Section III.H.2.c of this Title V permit. [RCSA §22a-174-3b(e)(3)]

c. Record Keeping Requirements

The Permittee shall keep any of the following records to demonstrate compliance with Section III.H.2.a of this Title V permit:

- i. A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;
- ii. A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
- iii. 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.

[RCSA §22a-174-3b(h)]

3. 40 CFR Part 60 Subpart IIII – Standard of Performance for Stationary Compression Ignition Internal Combustion Engines [Federal]

a. Limitation or Restriction

- i. The Permittee shall comply with the emission standards for new nonroad compression ignition engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for each engine in GEU-8. [40 CFR §60.4205(b)]
- ii. The Permittee shall operate and maintain each engine in GEU-8 to 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 purchase diesel fuel that meets the requirements of 40 CFR §80.510(b) for nonroad diesel fuel. [40 CFR §60.4207(b)]
- iv. If any engine in GEU-8 does not meet the standards applicable to non-emergency engines as specified in Section III.H.3.a of this Title V permit, the Permittee must install a non-resettable hour meter prior to startup of the engine. [40 CFR §60.4209(a)]
- v. The Permittee shall do all of the following, except as permitted under Section III.H.3.a.vii of this Title V permit:

Section III: Applicable Requirements and Compliance Demonstration

- (a) Operate and maintain the stationary combustion ignition 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 requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply.

[40 CFR §60.4211(a)]

- vi. The Permittee shall ensure each engine in GEU-8 is certified to the emission standards in 40 CFR §60.4205(b) for the same model year and maximum engine power. The engines shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Section III.H.3.a.vii of this Title V permit. [40 CFR §60.4211(c)]
- vii. If the Permittee does not install, configure, operate, and maintain the engines in GEU-8 and control devices (if installed) 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 by following the requirements in 40 CFR §§60.4211(g)(1) through (3) based on the size of the engine. [40 CFR §60.4211(g)]
- viii. The Permittee must operate the engines in GEU-8 according to the requirements in 40 CFR §§60.4211(f)(1) through (3). In order for each engine to be considered an emergency stationary ICE under 40 CFR Part 60 Subpart III, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR §§60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 CFR §§60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR Part 60 Subpart III and must meet all requirements for non-emergency engines. [40 CFR §60.4211(f)]

b. Monitoring Requirements

The Permittee shall comply with all monitoring and testing requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart III, Table 8.
[40 CFR §60.4218]

c. Record Keeping Requirements

- i. Starting with the model years in 40 CFR Part 60 Subpart III, Table 5, if the any unit in GEU-8 does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee must 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 must record the time of operation of the engine and the reason the engine was in operation during that time. (The model year for EU-201 predates those listed in 40 CFR Part 60 Subpart III, Table 5. Therefore, these record keeping requirements do not apply to EU-201.) [40 CFR §60.4214(b)]
- ii. The Permittee shall comply with all record keeping requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart III, Table 8.
[40 CFR §60.4218]
- iii. The Permittee shall maintain appropriate records indicating compliance with the emission limitation and operational requirements in Sections III.H.3.a of this Title V permit. Such records may include, but are not limited to, manufacturer's specifications and operating recommendations, purchase records and internal operating procedures. [RSCA §22a-174-33(j)(1)(K)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

d. Reporting Requirements

The Permittee shall comply with all reporting requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart III, Table 8. [40 CFR §60.4218]

I. EMISSIONS UNIT 200 (EU-200)

(Cummins Emergency Generator Model No. LTA-10G1 [1022 Chapel St.]

1. Maximum Operating Hours

a. Limitation or Restriction

Maximum operating hours shall not be greater than 300 hours during any 12 month rolling aggregate and the engine shall be operated only during periods of testing and scheduled maintenance or during an emergency as defined in RCSA §22a-174-22. [RCSA §22a-174-3b(e)(2)(C)]

b. Monitoring and Testing Requirements

The Permittee shall monitor hours of operation on a monthly basis. [RCSA §22a-174-3b(e)(4)]

c. Record Keeping Requirements

The Permittee shall maintain records of hours of operation on a monthly basis and a 12 month rolling aggregate. Maximum annual operating hours shall be based on any consecutive 12 month time period and shall be determined by adding each month's operating hours to that of the previous 11 months. [RCSA §22a-174-3b(e)(4)]

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

The Permittee shall not exceed the sulfur content of motor vehicle diesel fuel where "motor vehicle diesel fuel" is defined as in RCSA §22a-174-42 for any non-gaseous fuel consumed by EU-200. [RCSA §22a-174-3b(e)(2)(D)]

b. Monitoring Requirements

The Permittee shall monitor the sulfur content for the fuel burned by keeping the records specified in Section III.I.2.c of this Title V permit. [RCSA §22a-174-3b(e)(3)]

c. Record Keeping Requirements

The Permittee shall keep any of the following records to demonstrate compliance with Section III.I.2.a of this Title V permit:

- i. A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;
- ii. A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
- iii. 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.

[RCSA §22a-174-3b(h)]

Section III: Applicable Requirements and Compliance Demonstration

J. EMISSIONS UNIT 202 (EU-202)

(Cummins Emergency Generator Model No. DGFC-580102 [67-81 Howe St.])

1. Maximum Operating Hours

a. Limitation or Restriction

Maximum operating hours shall not be greater than 300 hours during any 12 month rolling aggregate and the engine shall be operated only during periods of testing and scheduled maintenance or during an emergency as defined in RCSA §22a-174-22. [RCSA §22a-174-3b(e)(2)(C)]

b. Monitoring and Testing Requirements

The Permittee shall monitor hours of operation on a monthly basis. [RCSA §22a-174-3b(e)(4)]

c. Record Keeping Requirements

The Permittee shall maintain records of hours of operation on a monthly basis and a 12 month rolling aggregate. Maximum annual operating hours shall be based on any consecutive 12 month time period and shall be determined by adding each month's operating hours to that of the previous 11 months. [RCSA §22a-174-3b(e)(4)]

2. Maximum Fuel Sulfur Content

a. Limitation or Restriction

The Permittee shall not exceed the sulfur content of motor vehicle diesel fuel where "motor vehicle diesel fuel" is defined as in RCSA §22a-174-42 for any non-gaseous fuel consumed by EU-202. [RCSA §22a-174-3b(e)(2)(D)]

b. Monitoring Requirements

The Permittee shall monitor the sulfur content for the fuel burned by keeping the records specified in Section III.J.2.c of this Title V permit. [RCSA §22a-174-3b(e)(3)]

c. Record Keeping Requirements

The Permittee shall keep any of the following records to demonstrate compliance with Section III.J.2.a of this Title V permit:

- i. A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;
- ii. A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
- iii. 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.

[RCSA §22a-174-3b(h)]

Section III: Applicable Requirements and Compliance Demonstration

3. 40 CFR Part 60 Subpart IIII – Standard of Performance for Stationary Compression Ignition Internal Combustion Engines [Federal]

a. Limitation or Restriction

- i. The Permittee shall comply with the emission standards for new nonroad compression ignition engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power as EU-202. [40 CFR §60.4205(b)]
- ii. The Permittee shall operate and maintain EU-202 to 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 purchase diesel fuel that meets the requirements of 40 CFR §80.510(b) for nonroad diesel fuel. [40 CFR §60.4207(b)]
- iv. If EU-202 does not meet the standards applicable to non-emergency engines as specified in Section III.J.3.a of this Title V permit, the Permittee must install a non-resettable hour meter prior to startup of the engine. [40 CFR §60.4209(a)]
- v. The Permittee shall do all of the following, except as permitted under Section III.J.3.a.vii of this Title V permit:
 - (a) Operate and maintain the stationary combustion ignition 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 requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply.[40 CFR §60.4211(a)]
- vi. The Permittee shall ensure EU-202 is certified to the emission standards in 40 CFR §60.4205(b) for the same model year and maximum engine power. The engines shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Section III.J.3.a.vii of this Title V permit. [40 CFR §60.4211(c)]
- vii. If the Permittee does not install, configure, operate, and maintain EU-202 and control devices (if installed) 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 by following the requirements in 40 CFR §§60.4211(g)(1) through (3) based on the size of the engine. [40 CFR §60.4211(g)]
- viii. The Permittee must operate EU-202 according to the requirements in 40 CFR §§60.4211(f)(1) through (3). In order 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, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR §§60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 CFR §§60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR Part 60 Subpart IIII and must meet all requirements for non-emergency engines. [40 CFR §60.4211(f)]

Section III: Applicable Requirements and Compliance Demonstration

b. Monitoring Requirements

The Permittee shall comply with all monitoring and testing requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart IIII, Table 8. [40 CFR §60.4218]

c. Record Keeping Requirements

- i. The Permittee shall comply with all record keeping requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart IIII, Table 8. [40 CFR §60.4218]
- ii. The Permittee shall maintain appropriate records indicating compliance with the emission limitation and operational requirements in Sections III.J.3.a of this Title V permit. Such records may include, but are not limited to, manufacturer's specifications and operating recommendations, purchase records and internal operating procedures. [RSCA §22a-174-33(j)(l)(K)(ii)]

d. Reporting Requirements

The Permittee shall comply with all reporting requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart IIII, Table 8. [40 CFR §60.4218]

Section III: Applicable Requirements and Compliance Demonstration

K. PREMISES-WIDE GENERAL REQUIREMENTS

1. **RCSA §22a-174-3c:** The Permittee shall comply with all applicable requirements in RCSA §22a-174-3c for the emissions units that the Permittee elects to operate under these permit exemptions.
2. **Annual Emission Statements:** The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4(d)(1).
3. **Emissions Testing:** The Permittee shall comply with the procedures for sampling, emission testing, sample analysis, and RCSA §22a-174-5.
4. **Emergency Episode Procedures:** The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
5. **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.
6. **Prohibition of Air Pollution:** The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
7. **Public Availability of Information:** The public availability of information shall apply, as set forth in RCSA §22a-174-10.
8. **Prohibition Against Concealment/Circumvention:** The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
9. **Violations and Enforcement:** The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
10. **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.
11. **No Defense to Nuisance Claim:** The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.
12. **Severability:** The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
13. **Responsibility to Comply:** The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
14. **Particulate Emissions:** The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18. (Section 18 approved by EPA on 9-23-1982, current Regulation submitted to EPA on 12-1-2004.)
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.

Section III: Applicable Requirements and Compliance Demonstration

- 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 emissions as set forth in RCSA §22a-174-22.
- 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. Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
- 20. Chemical Accident Provisions:** The Permittee shall comply with all applicable requirements of 40 CFR Part 68 Subpart G.
- 21. Protection of Stratospheric Ozone:** The Permittee shall comply with all applicable requirements of 40 CFR Part 82 Subpart F.

Section IV: Compliance Schedule

TABLE IV: COMPLIANCE SCHEDULE				
Emissions Unit	Applicable Regulations	Steps Required for Achieving Compliance (Milestones)	Date by which Each Step is to be Completed	Dates for Monitoring, Record Keeping, and Reporting
		No steps are required for achieving compliance at this time.		

Section V: State Enforceable Terms and Conditions

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

State Enforceable Terms and Conditions

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

Section VI: Title V Requirements

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

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

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

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

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

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

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

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

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

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

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

Section VI: Title V Requirements

- 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 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:

- i. Each deviation caused by upset or control equipment deficiencies; and
- ii. 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
- iii. Each deviation caused by a failure of the monitoring system to provide reliable data.

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

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

- i. The type of monitoring or records used to obtain such data, including record keeping;
- ii. The date, place, and time of sampling or measurement;
- iii. The name of the individual who performed the sampling or the measurement and the name of such individual's employer;
- iv. The date(s) on which analyses of such samples or measurements were performed;
- v. The name and address of the entity that performed the analyses;

Section VI: Title V Requirements

- vi. The analytical techniques or methods used for such analyses;
- vii. The results of such analyses;
- viii. The operating conditions at the subject source at the time of such sampling or measurement; and
- ix. 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:

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

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

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

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

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

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

Notwithstanding Section VI.D 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:

- i. For any hazardous air pollutant, no later than 24 hours after such deviation commenced; and
- ii. 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.

Section VI: Title V Requirements

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

This Title V permit shall not be deemed to:

- i. 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;
- ii. Authorize emissions of an air pollutant so as to exceed levels prohibited pursuant to 40 CFR Part 72;
- iii. 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
- iv. 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.

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.

Section VI: Title V Requirements

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:

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

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

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

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

V. TRANSFERS [RCSA §22a-174-2a(g)]

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

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

W. REVOCATION [RCSA §22a-174-2a(h)]

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