

# 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	213-0069-TV	
Client/Sequence/Town/Premises Numbers	8095/01/213/01	
Date Issued	November 5, 2019	
Expiration Date	November 5, 2024	

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Algonquin Power V	Vi	indsor	Lock	ks .	LL	C
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#### **Premises Location:**

26 Canal Bank Road, Windsor Locks, CT 06096

# Name of Responsible Official and Title:

Steve Burns, Director Thermal

All the following attached p	pages, 2 through 52	2, are hereby in	ncorporated by r	eference into	this Title V
permit.					

/s/Tracy R. Babbidge for	11/5/2019
Betsey C. Wingfield	Date
Deputy Commissioner	

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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

#### Abbreviation/Acronym

#### Description

acfm
ASC
Actual Cubic Feet per Minute
ASC
Actual Stack Concentration
CAIR
Clean Air Interstate Rule
CEM
Continuous Emission Monitor
CFR
Code of Federal Regulations
CGS
Connecticut General Statutes
CMS
Continuous Monitoring System

CO Carbon Monoxide

DERC Discrete Emission Reduction Credit

EU Emissions Unit

EPA Environmental Protection Agency

°F Degree Fahrenheit

ft<sup>3</sup> Cubic feet gal Gallons

GEU Grouped Emissions Unit GHG Green House Gases

 $\begin{array}{ll} gr & Grain \\ H_2O & Water \\ H_2SO_4 & Sulfuri \end{array}$ 

H<sub>2</sub>SO<sub>4</sub> Sulfuric Acid HAP Hazardous Air Pollutant

Hg Mercury

ISO Independent System Operator

hr Hour lb Pound

MASC Maximum Allowable Stack Concentration

MMBtu Million British Thermal Units

MMcf Million cubic feet

MMscf Million standard cubic feet

MW Megawatts
NO<sub>x</sub> Nitrogen Oxides
NSR New Source Review

O<sub>2</sub> Oxygen P.O. Postal Office

Pb Lead

PM Particulate Matter

PM<sub>10</sub> Particulate Matter less than 10 microns
PM<sub>2.5</sub> Particulate Matter less than 2.5 microns
ppmvd Parts per million, volumetric basis dry
RCSA Regulations of Connecticut State Agencies

scf Standard cubic feet

SIC Standard Industrial Classification Code

SCR Selective Catalytic Reduction

SO<sub>2</sub> Sulfur Dioxide

TA&O Trading Agreement and Order

TBD To be determined

VOC Volatile Organic Compound

yr Year

#### **Section I: Premises Information**

#### A. PREMISES INFORMATION

Nature of Business: Electricity/steam generation

Primary SIC: 4931

Facility Mailing Address: Algonquin Power Windsor Locks LLC

P.O. Box 289 26 Canal Bank Road Windsor Locks, CT 06096

Telephone Number: (860) 627-6616

#### **B. PREMISES DESCRIPTION**

Algonquin Power Windsor Locks Cogeneration facility (APWL – Cogeneration facility), is a combined-cycle cogeneration plant producing electricity and steam through a simple topping cycle. The facility consists of a General Electric model MS6001(B) stationary gas turbine (EU-1) generator with a two pressure waste heat boiler, two Nebraska Modified Type A package boilers (EU-2 and EU-3) and a 15 MW Solar Titan 130 gas turbine (EU-7) with a lean premix combustor, a non-fired heat recovery steam generator, an SCR system and an oxidation catalyst.

The facility also includes two 180,000 gallon No. 2 fuel oil storage tanks, for which there are no source specific applicable requirements. The facility produces and sells electricity to ISO New England as well as electricity and steam to the adjacent paper mill owned and operated by Ahlstrom Munksjo.

APWL-Cogeneration facility is a Title V source located in a serious ozone non-attainment area as defined in RCSA §22a-174-1. The facility is a Title V source as emissions are greater than the major source threshold levels for NOx, CO and GHG.

# **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, Orders or Regulations into this Title V permit.

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit	Emissions Unit Description	Control Unit Description	Permit, Order or Regulation Number	
EU-1	General Electric Turbine Model MS6001(B) Equipment No. G-101 Construction date: 02/15/1988  Natural gas: 555.2 MMBtu/hr No. 2 fuel oil: 529.5 MMBtu/hr	Steam Injection	P 213-0029  RCSA §22a-174-22e  40 CFR Part 60 Subpart GG  CAIR  Trading Agreement & Order	
EU-2	Nebraska Modified Type A Boiler Equipment No. H-102A Construction date: 02/15/1988 Natural gas: 177.6 MMBtu/hr No. 2 fuel oil: 170.1 MMBtu/hr	Low NOx Burner	No. 8374 P 213-0031 RCSA §22a-174-22e 40 CFR Part 60 Subpart Db 40 CFR Part 63 Subpart JJJJJJ	
EU-3	Nebraska Modified Type A Boiler Equipment No. H-102B Construction date: 02/15/1988 Natural gas: 177.6 MMBtu/hr No. 2 fuel oil: 170.1 MMBtu/hr	Low NOx Burner	P 213-0032  RCSA §22a-174-22e  40 CFR Part 60 Subpart Db  40 CFR Part 63 Subpart JJJJJJ	
EU-7	Less than 15 MW Solar Titan 130 gas turbine Construction date: 04/16/2012 Natural gas: 178 MMBtu/hr	Oxidation Catalyst Selective Catalytic Reduction	P 213-0116  RCSA §22a-174-22e  40 CFR Part 60 Subpart KKKK	

# **Section II: Emissions Units Information**

# **B. OPERATING SCENARIO IDENTIFICATION**

The Permittee shall be allowed to operate under the following Standard Operating Scenarios provided that such operations are explicitly provided for and described in Table II.B.

TABLE II.B: OPERATING SCENARIO IDENTIFICATION			
Description of Scenario			
wo turbines and two boilers: The standard use of this puipment is to produce electricity and steam.  ationary gas turbine (EU-1- Permit No. 213-0029) wo Nebraska boilers (EU-2 – Permit No. 213-0031 and U-3 – Permit No. 213-0032) burn natural gas and No. 2 el oil. The turbine and the boilers can be operated by emselves or under the following combinations: turbine and the equivalent of one boiler, two boilers without the rbine.  olar Titan 130 turbine (EU-7 – Permit No. 213-0116): this rbine burns natural gas only.			
at wo U-el er d			

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

#### A. EMISSIONS UNIT 1 (EU-1):

**General Electric Turbine operating under:** 

- Permit No. 213-0029;
- RCSA §22a-174-22e;
- Trading Agreement & Order No. 8374; and
- Subject to 40 CFR Part 60 Subpart GG

#### 1. Operational Conditions

- a. Limitation or Restriction [Permit No. 213-0029]
  - i. Fuel Types: Natural gas and No. 2 fuel oil
  - ii. Maximum No. 2 Fuel Oil Sulfur content (% by weight, dry basis): 0.05
  - iii. Maximum Natural Gas Firing Rate:
    - (A) Natural gas: 539,029.1 ft<sup>3</sup>/hr
    - (B) No. 2 Fuel Oil: 3,755.3 gal/hr
  - iv. Maximum Gross Heat Input:
    - (A) Natural gas: 555.2 MMBtu/hr @ 0°F
    - (B) No. 2 Fuel Oil: 529.5 MMBtu/hr @ 0°F
  - v. Minimum Exhaust Gas Flow Rate at Maximum Operation:
    - (A) Gas Turbine: 430,965 acfm
    - (B) Gas Turbine with the Equivalent of one Nebraska Boiler (EU-2 and EU-3): 480,801 acfm
  - vi. The Permittee shall operate the equivalent of only one of the two Nebraska boilers (EU-2 and EU-3) at full load simultaneously with the stationary gas turbine (EU-1).
  - vii. The Permittee shall be allowed to burn a combination of No. 2 fuel oil and natural gas for the purpose of maintenance for a period not to exceed one hour per week. During these periods, the gas turbine will be subject to the No. 2 fuel oil allowable emissions of this Tittle V permit.
- b. Monitoring and Testing Requirements
  - i. The Permittee shall use individual fuel metering devices or billing meters to continuously monitor fuel feed to the turbine. [Permit No. 213-0029]
  - ii. The Permittee shall maintain and operate a CMS for all parameters and air pollution control parameters necessary to determine compliance with the limits in Section III.A.1.a of this Title V permit. [Permit No. 213-0029 and RCSA §22a-174-33(j)(1)(K)]

#### c. Record Keeping Requirements

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. 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. [Permit No. 213-0029]
- ii. The Permittee shall keep records of the natural gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel specifying the maximum total sulfur content for the natural gas. [Permit No. 213-0029]
- iii. 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 the delivery, the name of the fuel supplier, type of fuel delivered, and the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [Permit No. 213-0029]
- iv. The Permittee shall keep records of all exceedances of any operating parameter. Such records shall include: [Permit No. 213-0029]
  - (A) the date and time of the exceedance;
  - (B) a detailed description of the exceedance; and
  - (C) the duration of the exceedance.
- v. The Permittee shall keep all records required by this Title V permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 213-0029]

#### d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an emissions limitation or operating parameter, 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 operating parameter, no later than ten days after such exceedance commenced.
  [Permit No. 213-0029]
- ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

# 2. Opacity

- a. Limitation or Restriction
  - i. This equipment shall not exceed 10% opacity for any 6 minute block average or 40% instantaneous opacity. [Permit No. 213-0029]
  - ii. The Permittee shall shutdown the turbine in accordance with the following: [Permit No. 213-0029]

Parameter: Opacity

(A) Shutdown Limits: Five consecutive 6 minute block average > 40%

#### b. Monitoring and Testing Requirements

i. The Permittee shall verify Opacity using CEM data on the following basis: [Permit No. 213-0029]

Parameter: Opacity

(A) Averaging Times: six minute block

(B) Emission Limit: 10%

# c. Record Keeping Requirements

The Permittee shall keep all records required by this Title V permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 213-0029]

#### d. Reporting Requirements

The Permittee shall submit to the Department a quarterly summary and excess emissions report specified in RCSA §22a-174-4(d) for the stationary gas turbine (EU-1). [RCSA §22a-174-4(d)]

# 3. PM, PM<sub>10</sub>, NOx, VOC, CO, Pb, GHG and sulfuric acid

- a. Limitation or Restriction
  - i. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [Permit No. 213-0029]
  - ii. The Permittee shall operate and maintain this equipment, 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.

    [Permit No. 213-0029]
  - iii. The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time, unless otherwise noted. [Permit No. 213-0029]
    - (A) Natural Gas
      - (1) Criteria Pollutants
        - (a) Filterable PM: 7.73 lb/hr, 0.014 lb/MMBtu, 29.11 Tons per 12 Consecutive Months
        - (b) Filterable PM<sub>10</sub>: 2.37 lb/hr, 4.26E-3 lb/MMBtu, 8.87 Tons per 12 Consecutive Months
        - (c) PM: lb/hr, lb/MMBtu and Tons per 12 Consecutive Months: TBD
        - (d) PM<sub>10</sub>: lb/hr, lb/MMBtu and Tons per 12 Consecutive Months: TBD

- (e) PM<sub>2.5</sub>: lb/hr, lb/MMBtu and Tons per 12 Consecutive Months: TBD
- (f) SO<sub>2</sub>: 0.32 lb/hr, 1.21 Tons per 12 Consecutive Months
- (g) NOx: 82.28 lb/hr, 42 ppmvd @ 15% O<sub>2</sub>. 309.8 Tons per 12 Consecutive Months
- (h) VOC: 14.36 lb/hr, 0.026 lb/MMBtu<sup>(1)</sup>, 54.06 Tons per 12 Consecutive Months
- (i) CO: 61.85 lb/hr, 232.87 Tons per 12 Consecutive Months
- (j) GHG: 261,241 Tons per 12 Consecutive Months

#### (2) Non-Criteria Pollutant

(a) H<sub>2</sub>SO<sub>4</sub>: 0.10 lb/hr, 0.29 Tons per 12 Consecutive Months

#### (B) No. 2 Fuel Oil

- (1) Criteria Pollutants
  - (a) Filterable PM: 18.53 lb/hr, 0.035 lb/MMBtu, 69.23 Tons per 12 Consecutive Months
  - (b) Filterable PM<sub>10</sub>: 16.23 lb/hr, 3.06E-2 lb/MMBtu, 60.63 Tons per 12 Consecutive Months
  - (c) PM: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (d) PM<sub>10</sub>: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (e) PM<sub>2.5</sub>: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (f) SO<sub>2</sub>: 26.48 lb/hr, 98.90 Tons per 12 Consecutive Months
  - (g) NOx: 130.25 lb/hr, 62 ppmvd @ 15%  $O_2^{(1)}$ , 486.6 Tons per 12 Consecutive Months
  - (h) VOC: 13.77 lb/hr, 0.026 lb/MMBtu<sup>(1)</sup>, 51.43 Tons per 12 Consecutive Months
  - (i) CO: 57.71 lb/hr, 215.60 Tons per 12 Consecutive Months
  - (j) Pb: 0.007 lb/hr, 0.03 Tons per 12 Consecutive Months
  - (k) GHG: 347,295 Tons per 12 Consecutive Months

# (2) Non-Criteria Pollutants

(a) H<sub>2</sub>SO<sub>4</sub>: 3.15 lb/hr, 11.78 Tons per 12 Consecutive Months

<sup>(1)</sup> This limit shall not apply during periods of startup or shutdown.

<sup>(1)</sup> This limit shall not apply during periods of startup or shutdown

- (C) Annual Emission Limits Stationary Gas Turbine (EU-1) and the Equivalent of One Nebraska Boiler (EU-2 and EU-3) at Maximum Rated Capacity
  - (1) Criteria Pollutants
    - (a) PM<sup>(1)</sup>: 79.79 Tons per 12 Consecutive Months
    - (b) PM<sub>10</sub><sup>(1)</sup>: 66.32 Tons per 12 Consecutive Months
    - (c) PM<sub>2.5</sub>: TBD
    - (d) SO<sub>2</sub>: 136.15 Tons per 12 Consecutive Months
    - (e) NOx: 635.6 Tons per 12 Consecutive Months
    - (f) VOC: 58.44 Tons per 12 Consecutive Months
    - (g) CO: 296.6 Tons per 12 Consecutive Months
    - (h) Pb: 0.032 Tons per 12 Consecutive Months
    - (i) GHG: 458,862 Tons per 12 Consecutive Months
    - (1) *PM/PM*<sub>10</sub>: *Filterable Only*
  - (2) Non-Criteria Pollutant
    - (a) H<sub>2</sub>SO<sub>4</sub>: 12.6 Tons per 12 Consecutive Months
- iv. The Permittee shall demonstrate compliance with the emission limits in Section III.A.3 of this Title V permit by calculating the emission rates using the most recent approved stack test results for that pollutant; or if unavailable, emission factors from the following sources: [Permit No. 213-0029]

Natural Gas and No. 2 Fuel Oil

- NOx: CEM
- CO: Emission factor was calculated using CEM data from a Frame 6 turbine and best engineering judgement
- VOC: Emission factor was calculated using CEM CO data from a Frame 6 turbine and best engineering judgement
- PM/PM<sub>10</sub>/PM<sub>2.5</sub>, Pb, HAPs: Compilation of Air Pollutant Factors, AP42, Fifth Edition, Section 3.1, April 2000
- SO<sub>2</sub>: Mass Balance
- H<sub>2</sub>SO<sub>4</sub>: Mass balance

• Lead: No. 2 Fuel Oil: AP42, Fifth Edition, Table 3.1-2a (4/00)

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

- v. Definitions: [Permit No. 213-0029]
  - (A) "Event" shall be defined as the time it takes the combustion turbine to startup or shutdown.
  - (B) "Startup" shall be defined as that period of time from the initiation of combustion turbine firing until the unit reaches steady state operation.
  - (C) "Shutdown" shall be defined as that period of time from the initiation of the shutdown process of the combustion turbine until the point at which the combustion process stopped.
  - (D) "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or os a process to operate in a normal or usual manner.
  - (E) "Nebraska Boiler" means one or both boilers operating in accordance with Permit Nos. 213-0031 and 213-0032.
- vi. A period of startup or shutdown shall not exceed 180 minutes per event. [Permit No. 213-0029]
- vii. Steam Injection with NOx limits enforceable by CEM. [Permit No. 213-0029]

Target Steam/Fuel Ratios:

- (A) Natural gas: 1.13/1
- (B) No. 2 fuel oil: 1.25/1
- viii. The Permittee shall shutdown the turbine in accordance with the following: [Permit No. 213-0029]

Pollutant: NOx

- (A) Shutdown Limits: 24 consecutive 1 hour block average > permit limit
- ix. The Permittee shall properly operate the control equipment at all times that EU-1 is in operation and emitting air pollutants. [Permit No. 213-0029]
- b. Monitoring and Testing Requirements
  - The Permittee shall comply with the CEM requirements as set forth in RCSA §22a-174-4, RCSA §22a-174-22e, 40 CFR Part 60 Subpart GG and 40 CFR Parts 72-78, if applicable.
    [Permit No. 213-0029]
  - ii. CEM shall be required for the following pollutant/operational parameters and enforced on the following basis [Permit No. 213-0029]:

- (A) NOx (Burning No. 2 Fuel Oil):
  - (1) Averaging Time: 1 hour block
  - (2) Emission Limit: 62 ppmvd @  $15\% O_2^{(1)}$
- (B) NOx (Burning Natural Gas):
  - (1) Averaging Time: 1 hour block
  - (2) Emission Limit: 42 ppmvd @  $15\% O_2^{(1)}$
- (C) O<sub>2</sub>:
  - (1) Averaging Time: 1 hour block
  - (1) These limits shall not apply during periods of startup or shutdown.
- iii. The Permittee shall conduct a one time emission test on natural gas for PM (Filterable + Condensable); PM<sub>10</sub> (Filterable + Condensable) and PM<sub>2.5</sub> (Filterable + Condensable) within one year of the date of issuance of the minor permit modification to Permit No. 213-0029 (Permits Issued Date: August 15, 2018). [Permit No. 213-0029]
- iv. The Permittee shall conduct a one time emission test on No. 2 fuel oil for PM (Filterable + Condensable); PM<sub>10</sub> (Filterable + Condensable) and PM<sub>2.5</sub> (Filterable + Condensable) within six months of burning No. 2 fuel oil in the stationary gas turbine (EU-1) or any of the two Nebraska boiler after the issuance of Permit No. 213-0029 (Permit Issued Date: August 15, 2018). [Permit No. 213-0029]
- c. Record Keeping Requirements
  - i. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO, GHG and H<sub>2</sub>SO<sub>4</sub> emissions in units of tons for natural gas and No. 2 fuel oil separately. 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. [Permit No. 213-0029]
  - ii. Emissions during startup and shutdown shall be counted towards the annual emission limitation in Section III.A.3.a.i.(C) of this Title V permit. [Permit No. 213-0029]
  - iii. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO and H<sub>2</sub>SO<sub>4</sub> emissions in units of tons for EU-1, EU-2 and EU-3 combined. The monthly and consecutive 12 month emissions shall be calculated to demonstrate compliance with the annual emission limitation in Part III.A.3.a.i.(C) of this Title V permit. The combined consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's combined 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. [Permit No. 213-0029]
  - iv. The Permittee shall keep records of all exceedances of any operating parameter. Such records shall include: [Permit No. 213-0029]

- (A) the date and time of the exceedance;
- (B) a detailed description of the exceedance; and
- (C) the duration of the exceedance.
- v. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the stationary gas turbine (EU-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:

  [40 CFR §60.7(b), Permit No. 213-0029]
  - (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<sub>x</sub>, VOC and CO emissions emitted (lb) during the event. VOC and CO emissions during an event, shall be accounted by calculating emissions using the lb/hr allowable emissions in Section III.A.3 of this Title V permit.
- vi. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 213-0029]

#### d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an emissions limitation or operating parameter, 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: [Permit No. 213-0029]
  - (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.
- ii. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine (EU-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: [Permit No. 213-0029]
  - (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.

- iii. The Permittee shall notify the commissioner, in writing, of the date that No. 2 fuel oil is burned in either the stationary gas turbine (EU-1) or any of the two Nebraska boilers (EU-2 and EU-3), after the issuance of the minor modification to Permit Nos. 213-0029, 213-0031 and 213-0032 (Permits Issued Date: August 15, 2018). Such written notifications shall be submitted no later than 30 days after the subject event. [Permit No. 213-0029]
- iv. The Permittee shall submit the above notification to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127. [Permit No. 213-0029]
- v. The Permittee shall submit stack testing results within 60 days after completion of testing. [Permit No. 213-0029]
- vi. The Permittee shall submit a permit modification application within 90 days of submitting the results of the emission test to incorporate emission limits for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, filterable plus condensable for natural gas and No. 2 fuel oil into Permit No. 213-0029. [Permit No. 213-0029]

## 4. Hazardous Air Pollutants (HAPs) [STATE ONLY REQUIREMENT]

#### a. Limitation or Restriction

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous Air Pollutant (HAP) emitted and listed in RCSA §22a-174-29. [Permit No. 213-0029]

# b. Monitoring Requirements

Record keeping specified in Section III.A.4.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the Actual Stack Concentration (ASC) and MASC calculations for the stationary gas turbine (EU-1) to show compliance with RCSA §22a-174-29. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall make and keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 213-0029]

#### d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance or deviation of an emissions limitation or operating parameter, and shall identify the cause or likely cause of such exceedances or deviations, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures for any hazardous air pollutant, no later than 24 hours after such exceedance commenced. [Permit No. 213-0029]
- ii. The Permittee shall submit the above notifications to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127. [Permit No. 213-0029]

#### 5. NOx – RCSA §22a-174-22e

- a. Limitation or Restriction
  - i. Prior to June 1, 2023, unless allowed in accordance with TA&O 8374 and Section III.A.6 of this Title V permit, the Permittee shall not cause or allow emissions of NOx for EU-1 to exceed the following: [RCSA §§22a-174-22e(d)(5)(A), (B) and 22a-174-22e(d)(16)]

Note: Pursuant to RCSA §22a-174-22e(a)(1)(a), EU-1 is an "affected unit" because the turbine has a nameplate capacity greater than 15 MW.

#### (A) Phase 1

- (1) The following emission limitations, based on a daily block average for an emission unit with a NOx CEM system:
  - (a) Natural Gas: 42 ppmvd @ 15% O<sub>2</sub>
  - (b) No. 2 Fuel Oil: 65 ppmvd @ 15% O<sub>2</sub>
- (2) A daily block average includes all periods of operation, except as provided in RCSA §22a-174-22e(m)(3). [RCSA §22a-174-22e(d)(16)]
- (3) The following non-ozone season emissions limitations apply to a combined cycle combustion unit that is also an affected unit. The averaging period for the non-ozone season limit is October 1 through April 30 (7 month average):
  - (a) Natural Gas (non-ozone season): 0.15 lb/MMBtu
  - (b) No. 2 Fuel Oil (non-ozone season): 0.15 lb/MMBtu
- (4) The Permittee shall calculate an emission unit's non-ozone season emission rate as the sum of the emission unit's NOx emissions during the period from October 1 through April 30, inclusive, divided by the sum of the emission unit's heat input during the period from October 1 through April 30, inclusive. [RCSA §22a-174-22e(d)(19)]
- ii. On or after June 1, 2023 the Permittee shall either: [RCSA §§22a-174-22e(d)(4)(C), (D) and 22a-174-22e(d)(16)]
  - (A) Phase 2
    - (1) Not to cause or allow emission of NOx to exceed the following emissions limitations, based on a daily block average for an emission unit with a NOx CEM system:
      - (a) Natural Gas: 25 ppmvd @ 15% O<sub>2</sub>
      - (b) No. 2 Fuel Oil: 42 ppmvd @ 15% O<sub>2</sub>, and
    - (2) A daily block average includes all periods of operation, except as provided in RCSA §22a-174-22e(m)(3). [RCSA §22a-174-22e(d)(11)(C)]

- (3) Not cause or allow emissions of NOx to exceed the following non-ozone season emissions limitation applies to a combined cycle combustion turbine that is also an affected unit. The averaging period for the non-ozone season is October 1 through April 30 (7 month average):
  - (a) Natural Gas: 0.15 lb/MMBtu
  - (b) No. 2 Fuel Oil: 0.15 lb/MMBtu
- (4) The Permittee shall calculate an emission unit's non-ozone season emission rate as the sum of the emission unit's NOx emissions during the period from October 1 through April 30, inclusive, divided by the sum of the emission unit's heat input during the period from October 1 through April 30, inclusive. [RCSA §22a-174-22e(d)(19)]
- (B) Operate in accordance with a compliance option approved by the Department in accordance with RCSA §22a-174-22e(g), or
- (C) Operate in accordance with an approved case-by-case NOx RACT demonstration approved by the Department in accordance with RCSA §22a-174-22e(h), or
- (D) Cease operation in accordance with RCSA §22a-174-22e(f).
- b. Monitoring and Testing Requirements
  - i. The Permittee shall calibrate, maintain, operate and certify the CEM system to demonstrate compliance with RCSA §22a-174-22e. [RCSA §22a-174-22e(m)(1)]
  - ii. The Permittee shall collect qualified data for all emission unit operating conditions. Data collection shall include periods of startup or shutdown, monitoring system malfunctions, out-of-control periods, while conducting maintenance or repairs, and periods of required monitoring system quality assurance or quality control activities, such as calibration checks and required zero and span adjustments. [RCSA §22a-174-22e(m)(2)]
  - iii. Emissions data used to determine compliance with applicable emissions limitations in Section III.A.5 of this Title V permit shall not include data collected during the following periods: [RCSA §§22a-174-22e(m)(3)(A) through (D)]
    - (A) When the monitoring system is out-of-control as specified in the facility-specific monitoring plan;
    - (B) While conducting required monitoring system quality assurance or quality control activities, including calibration checks and required zero and span adjustments;
    - (C) While conducting maintenance or repairs of the monitoring system to prevent or correct a malfunction; or
    - (D) When the emission unit is not operating.
  - iv. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting performance or quality assurance testing of any CEM for NOx. Any such testing shall be conducted in accordance with a testing protocol approved by the commissioner. Any CEM for NOx shall be installed, calibrated and operated in accordance with the performance and quality assurance specifications contained in RCSA §22a-174-4 and 40 CFR Part 60, Subpart A, Appendix B and Appendix F, or, for affected units,

40 CFR Part 75. [RCSA §22a-174-22e(m)(4)]

#### c. Record Keeping Requirements

- i. The Permittee of an emission unit subject to RCSA §22a-174-22e shall make and keep the following records on and after May 1, 2018: [RCSA §22a-174-22e(j)(2)]
  - (A) The date and work performed for repairs, replacement of parts and other maintenance.
  - (B) CEM requirements:
    - (1) Records of all performance evaluations, calibration checks and adjustments on such monitor,
    - (2) A record of maintenance performed,
    - (3) All data necessary to complete quarterly reports required under RCSA §22a-174-22e(k)(3), and
    - (4) Charts, electronically stored data, and printed records produced by such CEM system as needed to demonstrate compliance.
  - (C) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22e.
- ii. The Permittee shall keep any records or reports required by an order or permit issued by the commissioner. [RCSA §22a-174-22e(j)(2)(G)]
- iii. The Permittee shall retain all records and reports produced pursuant to RCSA §22a-174-22e for five years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records shall be retained at the premises where the emission unit is located, unless the commissioner approves in writing the use of another location in Connecticut. [RCSA §22a-174-22e(j)(1)]

#### d. Reporting Requirements

- i. The Permittee shall submit, on forms prescribed by the commissioner, written quarterly reports of excess emissions and CEM system malfunctions. Such reports shall be submitted to the commissioner on or before January 30, April 30, July 30 and October 30 of each year. The reports shall have the information required in RCSA §22a-174-22e(k)(3). [RCSA §22a-174-22e(k)(3)]
- ii. Upon written notice, the commissioner may require the Permittee to provide all hourly CEM data, in a format acceptable to the commissioner, for the three calendar month period identified in such written notice. [RCSA §22a-174-22e(k)(4)]

#### 6. NOx Trading Agreement and Order No. 8374

- a. Limitation or Restriction
  - i. The Permittee may use emissions trading to comply with the limits of RCSA §22a-174-22e(d)(4)(A) and (C) and Section III.A.5 of this Tile V permit, subject to the provisions of Trading Agreement and Order No. 8374, until the date of expiration of in accordance with Paragraphs B.1.a through d of the TA&O. [TA&O No. 8374, Paragraph B.1.a through d]

- ii. The Permittee may only use emission trading, subject to the provisions of Trading Agreement and Order No. 8374 (TA&O), until the date of expiration of the TA&O as specified in Paragraphs B.1.a through d of the TA&O. [TA&O No. 8374, Paragraphs B.1.a through d]
- iii. The Permittee shall obtain and use sufficient DERCs in such manner as to comply with Paragraphs B.6 through B.8 of the TA&O. [TA&O No. 8374, Paragraph B.2]
- iv. Ozone Season Fuel Restrictions:
  - (A) Notwithstanding the provisions of Paragraph B.2 of the TA&O, when operating the stationary gas turbine (EU-1) during the Ozone Season, the Permittee shall operate the stationary gas turbine (EU-1) while firing or co-firing the lowest NOx emitting fuel type or combination of fuel types that the stationary gas turbine (EU-1) is authorized to burn in accordance with Departmental permit, registration, or applicable regulation. [TA&O No. 8374, Paragraph B.4]
  - (B) Notwithstanding Paragraph B.4 of the TA&O, during the Ozone Season, the Permittee may operate the stationary gas turbine (EU-1) on fuels that result in higher emissions of NOx in accordance with Paragraphs B.5.a thru d of the TA&O. [TA&O No. 8374, Paragraphs B. 5.a through d]

#### v. DERC Use:

On the first day of each calendar month, the Permittee shall possess a quantity of DERCs that equals or exceeds the quantity of actual DERCs required in that month. Compliance with Paragraph B.6 of the TA&O shall be determined pursuant to Paragraphs B.6.a and b of the TA&O. [TA&O No. 8374, Paragraphs B.6.a and b]

#### vi. Non-Ozone Season DERC Use:

The Permittee shall possess a quantity of DERCs that equals or exceeds the quantity of Non-ozone season actual DERCs required for that Non-ozone season. Compliance with Paragraph B.7 of the TA&O shall be determined pursuant to Paragraph B.7.a and b of TA&O. [TA&O No. 8374, Paragraphs B.7.a and b]

- vii. On or before January 31, of each calendar year, the Permittee shall deduct a quantity of DERCs from the current balance of DERCs possessed by the Permittee such that the total is equal to the sum of the actual DERCs required pursuant to Paragraph B.6 of the TA&O for the preceding calendar year, rounded up to the nearest whole ton. [TA&O No. 8374, Paragraph B.8]
- viii.Not more than 30 days after completion of the Non-Ozone season, the Permittee shall deduct quantity of DERCs from the current balance of DERCs possessed by the Permittee such that the total is equal to actual Non-Ozone season DERCs required for the most recently completed Non-Ozone season pursuant to Paragraph B.7 of the TA&O. [TA&O No. 8374, Paragraph B.9]

#### ix. Maintenance and Tune-up:

Not more than one year from the date of issuance of the TA&O (Issue Date: April 11, 2018), the Permittee shall perform maintenance and inspection of the stationary gas turbine (EU-1) of the TA&O. Maintenance and inspection shall be done pursuant to Paragraphs B.10.a through c of the TA&O. [TA&O No. 8374, Paragraphs B.10.a through c]

# b. Monitoring and Testing Requirements

Record keeping specified in Section III.A.5.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### c. Record Keeping Requirements

- i. Not more than 30 days after the completion of each Non-Ozone season, the Permittee shall record the Non-Ozone average NOx emission rate for the stationary gas turbine (EU-1) of the TA&O, the quantity of DERCs possessed on the first day of the Non-Ozone season, and the quantity of DERCs deducted in accordance with Paragraph B.7 of the TA&O. [TA&O No. 8374, Paragraph B.11.a]
- ii. On each day, during the Ozone season, that the Permittee operates in accordance with Paragraph B.5 of the TA&O, the Permittee shall make and keep records of all emission unit operations in accordance with Paragraph B.5 of the TA&O, including copies of all written correspondence demonstrating that operations are due to one or more of the factors described in Paragraphs B.5.a through B.5.d of the TA&O. [TA&O No. 8374, Paragraph B.11.b]
- iii. The Permittee shall make and keep records of the maintenance and tune up performed in the stationary gas turbine (EU-1) in accordance with Paragraphs B.10.d.i through iv of the TA&O. [TA&O No. 8374, Paragraph B.10.d]
- iv. The Permittee shall retain records and supporting documentation required by the TA&O for a minimum of five years, commencing on the date such records were created. The Permittee shall provide the records specified in the TA&O to the commissioner within 30 days of receipt of a written request from the commissioner. All records shall be maintained in accordance with RCSA §\$22a-174-4 and 22a-174-22e. [TA&O No. 8374, Paragraph B.12]

#### d. Reporting Requirements

- i. Not later than July 30 of each calendar year, the Permittee shall submit a written report containing copies of all records required by Section III.A.5.c of this Title V permit. The commissioner may prescribe the forms to be used for the submission of these reports. The Permittee shall submit these reports on such forms, if prescribed by the commissioner. [TA&O No. 8374, Paragraph B.13]
- ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

#### 7. Clean Air Interstate Rule (CAIR)

The stationary gas turbine (EU-1) is a CAIR NOx Ozone season unit and therefore is subject to RCSA §22a-174-22c. The unit shall comply with all applicable requirements stated in RCSA §22a-174-22c and the standard requirements of the CAIR permit application.

# B. GROUPED EMISSIONS UNIT 1 (GEU-1: EU-2 AND EU-3):

Two Nebraska Modified Type A Boilers Operating under:

- Permit Nos. 213-0031 and 213-0032;
- RCSA §22a-174-22e;
- Subject to 40 CFR Part 60 Subpart Db; and
- Subject to 40 CFR Part 63 Subpart JJJJJJ

#### 1. Operational Conditions

- a. Limitation or Restriction
  - i. Fuel Types: Natural gas and No. 2 fuel oil [Permit Nos. 213-0031 and 213-0032]
  - ii. Maximum No. 2 fuel oil sulfur content (% by weight, dry basis): 0.0015 [Permit Nos. 213-0031 and 213-0032]

Note: Pursuant to RCSA §22a-174-19b(c)(3), fuel stored in the state of Connecticut that meets any applicable sulfur content limitation at the time it is stored in the state of Connecticut, may be stored, offered for sale, sold, delivered or exchanged in trade for combustion in the state of Connecticut and combusted in the state of Connecticut even if the sulfur content limitation applicable at the time of storage has been changed subsequent to the date of storage.

- iii. Maximum Natural Gas Firing Rate (each Nebraska boiler): [Permit Nos. 213-0031 and 213-0032]
  - (A) Natural gas: 172,427 ft<sup>3</sup>/hr
  - (B) No. 2 fuel oil: 1,206 gal/hr
- iv. Gross Heat Input (each Nebraska boiler): [Permit Nos. 213-0031 and 213-0032]
  - (A) Natural gas: 177.6 MMBtu/hr
  - (B) No. 2 fuel oil: 170.1 MMBtu/hr
- v. Minimum Exhaust Gas Flow Rate at Maximum Operation (each Nebraska boiler): 49,836 acfm [Permit Nos. 213-0031 and 213-0032]
- vi. If one or both boilers are operating simultaneously with the stationary gas turbine (EU-1), the combined maximum firing rate of the boilers operating when burning No. 2 fuel oil is limited to 1,206 gal/hr. [Permit Nos. 213-0031 and 213-0032]
- vii. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [Permit Nos. 213-0031 and 213-0032]
- b. Monitoring and Testing Requirements

The Permittee shall use individual fuel metering devices or billing meters to continuously monitor fuel feed to each Nebraska boiler. [Permit Nos. 213-0031 and 213-0032]

- c. Record Keeping Requirements
  - i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption for each Nebraska boiler. 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.

    [Permit Nos. 213-0031 and 213-0032]
  - ii. 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, and the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [Permit Nos. 213-0031 and 213-0032]

- iii. The Permittee shall keep records of the natural gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel specifying the maximum total sulfur content for the natural gas. [Permit Nos. 213-0031 and 213-0032]
- iv. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit Nos. 213-0031 and 213-0032]

# d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an operating parameter, 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 for any other regulated air pollutant or operating parameter, no later than ten days after such exceedance commenced. [Permit Nos. 213-0031 and 213-0032]
- ii. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine (EU-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: [Permit Nos. 213-0031 and 213-0032]
  - (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.
- iii. The Permittee shall notify the commissioner, in writing, of the date that No. 2 fuel oil is burned in either the stationary gas turbine (EU-1) or any of the two Nebraska boilers (EU-2 and EU-3), after the issuance of the minor modification to Permit Nos. 213-0029, 213-0031 and 213-0032 (Permits Issued date: August 15, 2018). Such written notifications shall be submitted no later than 30 days after the subject event. [Permit Nos. 213-0031 and 213-0032]
- iv. The Permittee shall submit the above notification to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127. [Permit Nos. 213-0031 and 213-0032]

#### 2. Opacity

- a. Limitation or Restriction
  - i. This equipment shall not exceed 10% opacity for any 6 minute block average or 40% instantaneous opacity. [Permit Nos. 213-0031 and 213-0032]
  - ii. The Permittee shall shut down the boiler in accordance with the following (each Nebraska boiler): [Permit Nos. 213-0031 and 213-0032]

Parameter: Opacity

(A) Shutdown Limits: Five consecutive six minute block average > 40%

- b. Monitoring and Testing Requirements
  - i. The Permittee shall verify Opacity using CEM data on the following basis: [Permit Nos. 213-0031 and 213-0032]

Operational Parameter: Opacity

(A) Averaging Times: Six minute block

(B) Emission Limit: 10%

c. Record Keeping Requirements

The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit Nos. 213-0031 and 213-0032]

d. Reporting Requirements

The Permittee shall submit to the Department a quarterly summary and excess emissions report specified in 40 CFR §60.49(b) and RCSA §22a-174-4(d) for the two Nebraska boilers. [Permit Nos. 213-0029, RCSA §22a-174-33(j)(1)(K)(ii)]

# 3. PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NOx, VOC, CO, Pb, GHG and sulfuric acid

- a. Limitation or Restriction
  - i. The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time. [Permit Nos. 213-0031 and 213-0032]
    - (A) Natural Gas

Criteria Pollutants

- (2) Filterable PM: 0.86 lb/hr, 0.0049 lb/MMBtu, 3.77 Tons per 12 Consecutive Months
- (3) PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO and GHG
  - (a) PM: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (b) PM<sub>10</sub>: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (c) PM<sub>2.5</sub>: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (d) SO<sub>2</sub>: 0.10 lb/hr, 0.44 Tons per 12 Consecutive Months
  - (e) NOx: 19.54 lb/hr, 29 ppmvd, 85.59 Tons per 12 Consecutive Months
  - (f) VOC: 1.00 lb/hr, 4.38 Tons per 12 Consecutive Months

- (g) CO: 14.56 lb/hr, 63.77 Tons per 12 Consecutive Months
- (h) GHG: 83,567 Tons per 12 Consecutive Months

#### Non-Criteria Pollutants

- (i) H<sub>2</sub>SO<sub>4</sub>: 0.005 lb/hr, 0.02 Tons per 12 Consecutive Months
- (B) No. 2 Fuel Oil

#### Criteria Pollutants

- (1) Filterable PM and PM<sub>10</sub>
  - (a) PM: 2.41 lb/hr, 0.014 lb/MMBtu, 10.56 Tons per 12 Consecutive Months
  - (b) PM<sub>10</sub>: 1.30 lb/hr, 0.0077 lb/MMBtu, 5.710 Tons per 12 Consecutive Months
- (2) PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO and GHG
  - (a) PM: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (b) PM<sub>10</sub>: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (c) PM<sub>2.5</sub>: lb/hr, lb/MMBtu, Tons per 12 Consecutive Months: TBD
  - (d) SO<sub>2</sub>: 8.51 lb/hr, 37.25 Tons per 12 Consecutive Months
  - (e) NOx: 34.02 lb/hr, 52 ppmvd, 149.01 Tons per 12 Consecutive Months
  - (f) VOC: 0.82 lb/hr, 3.59 Tons per 12 Consecutive Months
  - (g) CO: 13.95 lb/hr, 61.10 Tons per 12 Consecutive Months
  - (h) Pb: 0.00051 lb/hr, 0.002 Tons per 12 Consecutive Months
  - (i) GHG: 111,567 Tons per 12 Consecutive Months

#### Non-Criteria Pollutants - No. 2 Fuel Oil

- (j) H<sub>2</sub>SO<sub>4</sub>: 0.188 lb/hr, 0.82 Tons per 12 Consecutive Months
- (C) Annual Emission Limits Stationary Gas Turbine (EU-1) and the Equivalent of One Nebraska Boiler (both burning No. 2 Fuel Oil) (EU-2 and EU-3) at Maximum Rated Capacity

# Criteria Pollutants

- (1) PM<sup>(1)</sup>: 79.79 Tons per 12 Consecutive Months
- (2) PM<sub>10</sub><sup>(1)</sup>: 66.32 Tons per 12 Consecutive Months
- (3) PM<sub>2.5</sub>: TBD
- (4) SO<sub>2</sub>: 136.15 Tons per 12 Consecutive Months
- (5) NOx: 635.6 Tons per 12 Consecutive Months
- (6) VOC: 58.44 Tons per 12 Consecutive Months

- (7) CO: 296.6 Tons per 12 Consecutive Months
- (8) Pb: 0.032 Tons per 12 Consecutive Months
- (9) GHG: 458,862 Tons per 12 Consecutive Months
  - $^{(1)}$  *PM/PM*<sub>10</sub>: *Filterable Only*

Non-Criteria Pollutants

(10)H<sub>2</sub>SO<sub>4</sub>: 12.6 Tons per 12 Consecutive Months

ii. The Permittee shall demonstrate compliance with the emission limits in Section III.B.3 of this Title V permit by calculating the emission rates using the most recent approved stack test results for that pollutant; or if unavailable, emission factors from the following sources:

[Permit Nos. 213-0031 and 213-0032]

Natural Gas and No. 2 Fuel Oil

- NOx: Continuous emissions monitoring system (CEM)
- SO<sub>2</sub>: Mass Balance
- PM/PM<sub>10</sub>/PM<sub>2.</sub>5, VOC and Lead: Compilation of Air Pollution Factors, AP42, Fifth Edition, Table 1.3 and 1.4
- H<sub>2</sub>SO<sub>4</sub>: Mass balance

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

- iii. The Permittee shall shutdown the boiler in accordance with the following: [Permit Nos. 213-0031 and 213-0032]
  - (A) NOx:

Shutdown Limit: 24 consecutive 1 hour block average > permit limit

- b. Monitoring and Testing Requirements
  - i. The Permittee shall comply with the CEM requirements as set forth in RCSA §22a-174-4. CEM shall be required for the following pollutant/operational parameters and enforced on the following basis: [Permit Nos. 213-0031 and 213-0032]
    - (A) NOx (Burning No. 2 Fuel Oil)
      - (1) Averaging Time: 1 hour block
      - (2) Emission Limit: 52 ppmvd
    - (B) NOx (Burning Natural Gas)
      - (1) Averaging Time: 1 hour block

- (2) Emission Limit: 29 ppmvd
- ii. The Permittee shall conduct a one time emission test on natural gas for PM (Filterable + Condensable); PM<sub>10</sub> (Filterable + Condensable) and PM<sub>2.5</sub> (Filterable + Condensable) within one year of the date of issuance of the minor permit modification to Permit Nos. 213-0031 and 213-0032 (Permits Issued Date: August 15, 2018). [Permit Nos. 213-0031 and 213-0032]
- iii. The permittee shall conduct a one time emission test on No. 2 fuel oil for PM (Filterable + Condensable); PM<sub>10</sub> (Filterable + Condensable) and PM<sub>2.5</sub> (Filterable + Condensable) within six months of burning No. 2 fuel oil in the stationary gas turbine (EU-1) or any of the two Nebraska boiler after the issuance of Permit Nos. 213-0031 and 213-0032 (Permit Issued Date: August 15, 2018). [Permit No. 213-0031 and 213-0032]

# c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO, GHG and H<sub>2</sub>SO<sub>4</sub> emissions in units of tons for each Nebraska boiler for natural gas and No. 2 fuel oil separately. 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. [Permit Nos. 213-0031 and 213-0032, RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO, GHG and H<sub>2</sub>SO<sub>4</sub> emissions in units of tons for EU-1, EU-2 and EU-3 combined. The monthly and consecutive 12 month emissions shall be calculated to demonstrate compliance with the annual emission limitation in Section III.B.3 of this Title V permit. The combined consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's combined 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. [Permit Nos. 213-0031 and 213-0032, RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit Nos. 213-0031 and 213-0032]

#### d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an emissions limitation or operating parameter, 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 for any other regulated air pollutant or operating parameter, no later than ten days after such exceedance commenced. [Permit Nos. 213-0031 and 213-0032]
- ii. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine (EU-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: [Permit Nos. 213-0031 and 213-0032]
  - (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.
- iii. The Permittee shall notify the commissioner, in writing, of the date that No. 2 fuel oil is burned in either the stationary gas turbine (EU-1) or any of the two Nebraska boilers (EU-2 and EU-3), after the issuance of the minor modification to Permit Nos. 213-0029, 213-0031 and 213-0032 (Permits Issued Date: August 15, 2018). Such written notifications shall be submitted no later than 30 days after the subject event. [Permit Nos. 213-0031 and 213-0032]
- iv. The Permittee shall submit the above notification to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127. [Permit Nos. 213-0031 and 213-0032]
- v. The Permittee shall submit stack testing results within 60 days after completion of testing. [Permit Nos. 213-0031 and 213-0032]
- vi. The Permittee shall submit a permit modification application within 90 days of submitting the results of the emission test to incorporate emission limits for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, filterable plus condensable for natural gas and No. 2 fuel oil. [Permit Nos. 213-0031 and 213-0032]
- vii. The Permittee shall submit, on forms prescribed by the commissioner, written quarterly reports of excess emissions and CEM system malfunctions. Such reports shall be submitted to the commissioner on or before January 30, April 30, July 30 and October 30 of each year. The reports shall have the information required in RCSA §22a-174-22e(k)(3). [RCSA §22a-174-22e(k)(3)]
- viii.Upon written notice, the commissioner may require the Permittee to provide all hourly CEM data, in a format acceptable to the commissioner, for the three calendar month period identified in such written notice. [RCSA §22a-174-22e(k)(4)]

#### 4. Hazardous Air Pollutants (HAPs) [STATE ONLY REQUIREMENT]

a. Limitation or Restriction

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous Air Pollutant (HAP) emitted and listed in RCSA §22a-174-29. [Permit Nos. 213-0031 and 213-0032]

b. Monitoring Requirements

Record keeping specified in Section III.B.4.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

- c. Record Keeping Requirements
  - The Permittee shall make and keep records of the Actual Stack Concentration (ASC) and MASC calculations for each one of the Nebraska boilers to show compliance with RCSA §22a-174-29. [RCSA §22a-174-33(j)(1)(K)(ii)]
  - ii. The Permittee shall make and keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

[Permit Nos. 213-0031 and 213-0032]

# d. Reporting Requirements

The Permittee shall notify the commissioner in writing of any exceedance or deviation of an emissions limitation or operating parameter, and shall identify the cause or likely cause of such exceedances or deviations, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures for any hazardous air pollutant, no later than 24 hours after such exceedance commenced. [Permit Nos. 213-0031 and 213-0032]

# 5. 40 CFR Part 63 Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources

- Classification: Existing oil fired boiler with an oxygen trim
- a. Limitation or Restriction
  - i. The Permittee shall conduct an initial tune-up as specified in 40 CFR §63.11214, and conduct a tune-up of each boiler every five years as specified in 40 CFR §63.11223. [40 CFR §63.11201(b), Table 2, Option 14]
  - ii. After the initial tune-up, subsequent tune-ups must be conducted no more than 61 months after the previous tune-up. [40 CFR §63.11223(c)]
- b. Monitoring and Testing Requirements

Record keeping specified in Section III.B.5.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

- 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 JJJJJJ and all documentation supporting initial Notification or Notification of Compliance Status. [40 CFR §63.11225(c)(1)]
  - ii. The Permittee must keep records identifying each boiler, the date of the tune-up, the procedures followed for tune-up, and the manufacturer's specification to which the boiler was tuned. [40 CFR §63.11225(c)(2)(i)]
  - iii. The Permittee must maintain on-site a tune-up report and submit, if requested by the Administrator, a report in accordance with 40 CFR §§63.11223(b)(6)(i) through (iii). [40 CFR §63.11223(b)(6)]
  - iv. The Permittee shall keep a copy of the energy assessment report. [40 CFR §63.11225(c)(2)(iii)]
  - v. The Permittee must prepared by March 1 of the year following the calendar year which a five year tune-up is completed. [40 CFR §63.11225(b)]
- d. Reporting Requirements

The Permittee must prepare and submit to the delegated authority upon request, the five year compliance report in accordance with 40 CFR §63.1125(b)(1) and (2). [40 CFR §63.11225(b)]

#### 6. NOx - RCSA §22a-174-22e

- a. Limitation or Restriction
  - i. The Permittee shall not cause or allow an emission unit to exceed the following emissions limitations, based on a daily block average for an emission unit with a NOx CEM system: [RCSA §§22a-174-22e(d)(3)(A) and (C)]

Note: Pursuant to RCSA §22a-174-22e(a)(1)(B), EU-2 and EU-3 are not considered "affected units" because each boiler's maximum heat input capacity is less than 250 MMBtu/hr.

- (A) Phase 1 (Beginning June 1, 2018 and ending May 31, 2023)
  - (1) Natural Gas: 0.20 lb/MMBtu
  - (2) No. 2 Fuel Oil: 0.20 lb/MMBtu
- (B) Phase 2 (Beginning June 1, 2023 and continuing thereafter)
  - (1) Natural Gas: 0.10 lb/MMBtu
  - (2) No. 2 Fuel Oil: 0.15 lb/MMBtu
- ii. The Permittee of an emission unit may cause or allow an emission unit to exceed the applicable emissions limitations specified in Section III.B.6.a.i in this Title V permit, provided the Permittee undertakes one of the following actions: [RCSA §§22a-174-22e(d)(1)(A), (B) and (C)]
  - (A) Implements an alternative compliance mechanism in accordance with RCSA §22a-174-22e(g);
  - (B) Operates under a case-by-case RACT determination in accordance with RCSA §22a-174-22e(h);
  - (C) Ceases operation in accordance with RCSA §22a-174-22e(f).
- b. Monitoring and Testing Requirements
  - i. The Permittee shall calibrate, maintain, operate and certify the CEM system to demonstrate compliance with RCSA §22a-174-22e. [RCSA §22a-174-22e(m)(1)]
  - ii. The Permittee shall collect qualified data for all emission unit operating conditions. Data collection shall include periods of startup or shutdown, monitoring system malfunctions, out-of-control periods, while conducting maintenance or repairs, and periods of required monitoring system quality assurance or quality control activities, such as calibration checks and required zero and span adjustments. [RCSA §22a-174-22e(m)(2)]
  - iii. Emissions data used to determine compliance with applicable emissions limitations in Section III.B.6 of this Title V permit shall not include data collected during the following periods:

    [RCSA §§22a-174-22e(m)(3)(A) through (D)]
    - (A) When the monitoring system is out-of-control as specified in the facility-specific monitoring plan;

- (B) While conducting required monitoring system quality assurance or quality control activities, including calibration checks and required zero and span adjustments;
- (C) While conducting maintenance or repairs of the monitoring system to prevent or correct a malfunction; or
- (D) When the emission unit is not operating.
- iv. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting performance or quality assurance testing of any CEM for NOx. Any such testing shall be conducted in accordance with a testing protocol approved by the commissioner. Any CEM for NOx shall be installed, calibrated and operated in accordance with the performance and quality assurance specifications contained in RCSA §22a-174-4 and 40 CFR Part 60, Subpart A, Appendix B and Appendix F. [RCSA §22a-174-22e(m)(4)]
- c. Record Keeping Requirements
  - i. The Permittee of an emission unit subject to RCSA §22a-174-22e shall make and keep the following records on and after May 1, 2018: [RCSA §22a-174-22e(j)(2)(B), (D), (E), (F), (G)]
    - (A) The date and work performed for repairs, replacement of parts and other maintenance;
    - (B) CEM requirements:
      - (1) Records of all performance evaluations, calibration checks and adjustments on such monitor,
      - (2) A record of maintenance performed,
      - (3) All data necessary to complete quarterly reports required under RCSA §22a-174-22e(k)(3), and
      - (4) Charts, electronically stored data, and printed records produced by such CEM system as needed to demonstrate compliance.
    - (C) For each tune-up, for each emission unit, conducted pursuant to RCSA §22a-174-22e(i):
      - (1) The date on which the emission unit is tuned-up; the name, title and affiliation of the person performing the tune-up, and a description of work performed, and
      - (2) The procedures used to inspect and perform adjustments.
    - (D) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22e;
    - (E) Any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22e.
  - ii. The Permittee shall retain all records and reports produced pursuant to RCSA §22a-174-22e for five years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records shall be retained at the premises where the emission unit is located, unless the commissioner approves in writing the use of another location in Connecticut. [RCSA §22a-174-22e(j)(1)]

- d. Reporting Requirements
  - i. The Permittee shall submit to the commissioner, on forms provided by the commissioner, written quarterly reports of excess emissions and CEM system malfunctions. Such reports shall be submitted to the commissioner on or before January 30, April 30, July 30 and October 30 of each year. The information submitted shall be in accordance with RCSA §22a-174-22e(k)(3). [RCSA §22a-174-22e(k)(3)]
  - ii. Upon written notice, the commissioner may require the Permittee to provide hourly CEM data, in a format acceptable to the commissioner, for the three calendar month period identified in such written notice. [RCSA §22a-174-22e(k)(4)]
- C. EMISSIONS UNIT 7 (EU-7): Solar Gas Turbine Model Titan 130 operating under Permit No. 213-0116 and subject to 40 CFR Part 60 Subpart KKKK

# 1. Operational Conditions

- a. Limitation or Restriction
  - i. Fuel Type: Natural gas [Permit No. 213-0116]
  - ii. Fuel Sulfur Content: shall not exceed 20 gr/100 scf [40 CFR §60.4365(a)]
  - iii. Maximum Fuel Consumption over any Consecutive 12 Month Period: 1,516 MMcf/yr [Permit No. 213-0116]
  - iv. Maximum Natural Gas Firing Rate<sup>1</sup>: 0.173 MMscf/hr [Permit No. 213-0116]
    - <sup>1</sup> at 100% full load, 60% relative humidity, 0°F and 29.88 inches Hg ambient pressure
  - v. Minimum Exhaust Gas Flow rate at 100% load: 101,397 acfm [Permit No. 213-0116]
- b. Monitoring and Testing Requirements
  - i. The Permittee shall comply with the CEM requirements as set forth in RCSA §22a-174-4. CEM shall be required for the following pollutant/operational parameters and enforced on the following basis: [Permit No. 213-0116]

Operational Parameter: Fuel Consumption

- (A) Averaging Time: Continuous
- (B) Emission Limit: Manufacturer's recommendation
- (C) Units: scf
- ii. The Permittee shall use an individual non-resettable totalizing fuel metering device or billing meter to continuously monitor fuel feed to the turbine. [Permit No. 213-0116]
- iii. The Permittee shall comply with the monitoring requirements of 40 CFR Part 60 Subpart KKKK by contractually limiting the maximum sulfur content of natural gas. [40 CFR §60.4365(a)]

- c. Record Keeping Requirements
  - i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding 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. [Permit No. 213-0116]
  - ii. The Permittee shall keep records of all exceedances of any operating parameter. Such records shall include: [Permit No. 213-0116]
    - (A) the date and time of the exceedance:
    - (B) a detailed description of the exceedance; and
    - (C) the duration of the exceedance.
  - iii. The Permittee shall keep records, when turbines are changed for routine maintenance, to include the following: [Permit No. 213-0116]
    - (A) The date the turbine was changed,
    - (B) The reason for the change,
    - (C) Documentation that the replacement turbine is the same make and model number, and
    - (D) Documentation that the replacement turbine does not result in an increase in emissions, the emission of any new pollutants, or increases in electrical output of the turbine.
  - iv. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 213-0116]

#### d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an operating parameter, 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:

  [Permit No. 213-0116]
  - (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.
- ii. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine (EU-7), 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: [Permit No. 213-0116]
  - (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.

# 2. PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, VOC, CO, GHG and Ammonia

- a. Limitation or Restriction
  - i. The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time. [Permit No. 213-0116]
    - (A) Short Term Emission Limits

These short term emission limits do not apply during periods of startup and shutdown, unless otherwise noted.

#### Criteria Pollutants

- (1)  $PM_{10}/PM_{2.5}$ : 2.66 lb/hr
- (2) SO<sub>2</sub>: 1.59 lb/hr
- (3) NOx: 3.22 lb/hr, 5.0 ppmvd @ 15% O<sub>2</sub>
- (4) VOC: 2.39 lb/hr
- (5) CO: 2.37 lb/hr, 6.0 ppmvd @ 15% O<sub>2</sub>

#### Non-Criteria Pollutants

- (6) Ammonia: 5.0 ppmvd @ 15% O<sub>2</sub>
- (B) Startup and Shutdown Emission Limits
  - (1) NOx startup limit: 13.8 lb/event
  - (2) NOx shutdown limit: 6.0 lb/event
  - (3) CO startup limit: 740 lb/event
  - (4) CO shutdown limit: 405 lb/event
- (C) Annual Emission Limits
  - (1) PM<sub>10</sub>/PM<sub>2.5</sub>: 11.9 Tons per 12 Consecutive Months
  - (2) SO<sub>2</sub>: 7.0 Tons per 12 Consecutive Months
  - (3) NOx: 14.2 Tons per 12 Consecutive Months
  - (4) VOC: 10.9 Tons per 12 Consecutive Months
  - (5) CO: 17.3 Tons per 12 Consecutive Months
  - (6) GHG: 91,323 Tons per 12 Consecutive Months
- ii. The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints: [Permit No. 213-0116]

- (A) Start the ammonia injection as soon as minimum catalyst temperature is reached;
- (B) The oxidation catalyst shall not be bypassed during startup or shutdown;
- (C) The duration of startup shall not exceed 60 minutes for a hot start;
- (D) The duration of startup shall not exceed 120 minutes for a warm start;
- (E) The duration of startup shall not exceed 180 minutes for a cold start;
- (F) A hot start shall be defined as startup when the turbine has been down for less than 8 hours;
- (G) A warm start shall be defined as startup when the turbine has been down for more than 8 hours;
- (H) A cold start shall be defined as startup when the turbine has been down for more than 48 hours;
- (I) The duration of shutdown shall not exceed 30 minutes; and
- (J) Emissions during these periods shall be counted towards the annual emission limits stated herein.
- iii. Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources: [Permit No. 213-0116]
  - (A) NOx, CO: Stack test data.
  - (B) VOC and Ammonia: Stack test data.
  - (C) SO<sub>2</sub>, HAPs: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 3.1, April 2000 (turbine).
  - (D) PM<sub>10</sub>/PM<sub>2.5</sub>: Manufacturer's data
  - (E) NOx (startup/shutdown): Manufacturer's data
  - (F) CO (startup/shutdown): Manufacturer's data
- iv. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.
- v. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specification and written recommendations. The Permittee shall operate and maintain this stationary combustion turbine, 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. [Permit No. 213-0116]
- vi. The Permittee shall properly operate the control equipment at all times that this turbine is in operation and emitting pollutants. [Permit No. 213-0116]

- b. Monitoring and Testing Requirements
  - i. The Permittee shall comply with the CEM requirements as set forth in RCSA Section 22a-174-4. CEM shall be required for the following pollutant/operational parameters and enforced on the following basis: [Permit No. 213-0116]

(A) Operational Parameter: SCR Temperature

(1) Averaging Time: 4 hours rolling

(2) Emission Limit: Manufacturer's recommendation

(3) Unit: °F

(B) Operational Parameter: SCR Pressure Drop

(1) Averaging Time: 4 hours rolling

(2) Emission Limit: Manufacturer's recommendation

(3) Unit: Inches H<sub>2</sub>O

- ii. The Permittee shall continuously monitor and continuously record the SCR ammonia injection rate (lb/hr), operating temperature (°F) and 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 this Title V permit. [Permit No. 213-0116]
- iii. The Permittee shall continuously monitor and continuously record the oxidation catalyst inlet temperature (°F). The Permittee shall maintain this parameter within the range recommended by the manufacturer to achieve compliance with the emission limits in this Title V permit. [Permit No. 213-0116]
- iv. The Permittee shall perform inspections of the SCR and oxidation catalysts as recommended by the manufacturer. [Permit No. 213-0116]
- v. The Permittee shall conduct recurrent stack testing for NOx, CO, VOC and Ammonia within five years from the date of the previous stack test to demonstrate compliance with their respective limits. [Permit No. 213-0116]
- c. Record Keeping Requirements
  - i. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, 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.

Emissions during startup and shutdown shall be counted towards the annual emission limitations in Section III.C.2.a.i.(c) of this Title V permit. [Permit No. 213-0116]

ii. The Permittee shall keep records of all exceedances of any operating parameter. Such records shall include: [Permit No. 213-0116]

- (A) the date and time of the exceedance;
- (B) a detailed description of the exceedance; and
- (C) the duration of the exceedance.
- iii. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the stationary gas turbine (EU-7) and any malfunction of the air pollution control equipment. Such records shall contain the following information:

  [Permit No. 213-0116]
  - (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<sub>x</sub> and CO emissions emitted (lb) during the event.
- iv. The Permittee shall keep records of each delivery of anhydrous ammonia. The records shall include: [Permit No. 213-0116]
  - (A) the date of delivery;
  - (B) the name of the supplier; and
  - (C) the quantity of ammonia delivered.
- 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. [Permit No. 213-0116]
- vi. The Permittee shall keep records of the date and work performed for repairs, replacements of parts and other maintenance. [RCSA §22a-174-22e(j)(2)(B)]
- vii. The Permittee shall keep copies of all documents submitted to the commissioner. [RCSA §22a-174-22e(j)(2)(F)]
- viii. The Permittee shall keep any records or reports required by an order or permit issued by the commissioner. [RCSA §22a-174-22e(j)(2)(G)]
- ix. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 213-0116]

#### d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an operating parameter, 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:

  [Permit No. 213-0116]
  - (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.
- ii. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine (EU-7), 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: [Permit No. 213-0116]
  - (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.

## 3. Opacity

a. Limitation or Restriction

Opacity shall be no greater than 10% over any six minute block average. [Permit No. 213-0116]

b. Monitoring and Testing Requirements

If required by the commissioner, the Permittee shall measure opacity using 40 CFR Part 60, Appendix A, Reference Method 9. [Permit No. 213-0116]

- c. Record Keeping Requirements
  - i. The Permittee shall maintain records of the opacity tests required in Section III.C.3.b of this Title V permit. Such records shall include the dates, times, and places of all visible observations, persons performing the observations, test methods used, the operating conditions at the time of observation, and the results of such observation. [RCSA §22a-174-33(j)(1)(K)]
  - ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

#### d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA 22a-174-33(j)(1)(X)]

### 4. Hazardous Air Pollutants (HAPs) [STATE ONLY REQUIREMENT]

a. Limitation or Restriction

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous Air Pollutant (HAP) emitted and listed in RCSA §22a-174-29. [Permit No. 213-0116]

b. Monitoring Requirements

Record keeping specified in Section III.C.4.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

- c. Record Keeping Requirements
  - i. The Permittee shall make and keep records of the Actual Stack Concentration (ASC) and MASC calculations for each Nebraska boiler to show compliance with RCSA §22a-174-29. [RCSA §22a-174-33(j)(1)(K)]
  - ii. The Permittee shall make and keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 213-0116]
- d. Reporting Requirements

The Permittee shall notify the commissioner in writing of any exceedance or deviation of an emissions limitation or operating parameter, and shall identify the cause or likely cause of such exceedances or deviations, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures for any hazardous air pollutant, no later than 24 hours after such exceedance commenced. [Permit No. 213-0116]

#### 5. NOx – RCSA §22a-14-22e

- a. Limitation or Restriction
  - i. The Permittee shall not cause or allow an emission unit to exceed the following emission limitations, based on a daily block average for an emission unit with CEM system:

    [RCSA §§22a-174-22e(d)(5)(A) and (C)]

Note: Pursuant to RCSA §22a-174-22e(a)(1)(A), EU-7 is not considered an "affected unit" because the nameplate capacity of the unit is less than 15 MW

- (A) Phase 1 (Beginning June 1, 2018 and ending May 31, 2023)
  - (1) The following emission limitations, based on a daily block average for an emission unit with a NOx CEM system:
    - (a) Natural Gas: 42 ppmvd
    - (b) No. 2 Fuel Oil: 65 ppmvd
- (B) Phase 2 (Beginning June 1, 2023 and continuing thereafter)
  - (1) The following emissions limitations, based on a daily block average for an emission unit with a NOx CEM system:

- (a) Natural Gas: 25 ppmvd
- (b) No. 2 Fuel Oil: 42 ppmvd
- ii. Emissions limitations quantified in units of ppmvd shall be corrected to 15% oxygen. [RCSA §22a-174-22e(d)(16)]
- iii. The Permittee of an emission unit may cause or allow an emission unit to exceed the applicable emissions limitations specified in Section III.C.5.a.i in this Title V permit, provided the Permittee undertakes one of the following actions: [RCSA §§22a-174-22e(d)(1)(A), (B) and (C)]
  - (A) Implements an alternative compliance mechanism in accordance with RCSA §22a-174-22e(g);
  - (B) Operates under a case-by-case RACT determination in accordance with RCSA §22a-174-22e(h);
  - (C) Ceases operation in accordance with RCSA §22a-174-22e(f).
- b. Monitoring and Testing Requirements

The Permittee shall conduct periodic emissions testing in accordance with 40 CFR Part 60 Subpart KKKK to demonstrate compliance. [RCSA §22a-174-22e(i)(1)(B)]

- c. Record Keeping Requirements
  - i. The Permittee of an emission unit subject to RCSA §22a-174-22e shall make and keep the following records on and after May 1, 2018: [RCSA §22a-174-22e(j)(2)]
    - (A) Copies of all documents submitted to the commissioner pursuant o RCSA §22a-174-22e;
    - (B) The date and work performed for repairs, replacement of parts and other maintenance;
    - (C) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22e; and
  - ii. The Permittee shall retain all records and reports produced pursuant to RCSA §22a-174-22e for five years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records shall be retained at the premises where the emission unit is located, unless the commissioner approves in writing the use of another location in Connecticut. [RCSA §22a-174-22e(j)(1)]
- d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA 22a-174-33(j)(1)(X)]

## D. PREMISES-WIDE GENERAL REQUIREMENTS

- **1. Annual Emission Statements:** The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4(d)(1).
- **2. Emergency Episode Procedures:** The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
- **3. Reporting of Malfunctioning Control Equipment:** The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
- **4. Prohibition of Air Pollution:** The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
- **5. Public Availability of Information:** The public availability of information shall apply, as set forth in RCSA §22a-174-10.
- **6. Prohibition Against Concealment/Circumvention:** The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
- **7. Violations and Enforcement:** The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
- **8. Variances:** The Permittee may apply to the commissioner for a variance from one or more of the provisions of these regulations as set forth in RCSA §22a-174-13.
- **9. No Defense to Nuisance Claim:** The Permittee shall comply with the regulations as set forth in RCSA \$22a-174-14.
- **10. Severability:** The Permittee shall comply with the severability requirements as set forth in RCSA \$22a-174-15.
- **11. Responsibility to Comply:** The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
- **12. Particulate Emissions:** The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18.
- **13. Fuel Sulfur Content:** The Permittee shall not use No. 2 heating oil that exceeds fifteen parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(B).
- **14. Sulfur Dioxide Emissions:** The Permittee shall comply with the requirements for Control of Sulfur Dioxide Emissions from Power Plants and other large stationary sources of air pollution as set forth in RCSA §22a-174-19a.
- **15. Sulfur Compound Emissions:** The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §§22a-174-19, 22a-174-19a and 22a-174-19b, as applicable.
- **16. Organic Compound Emissions:** The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.

- **17. Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22e.
- **18. Ambient Air Quality:** The Permittee shall not cause or contribute to a violation of an ambient air quality standard as set forth in RCSA §22a-174-24(b).
- **19. Open Burning:** The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
- **20. Asbestos:** Should the premises, as defined in 40 CFR §61.145, become subject to the national emission standard for asbestos regulations in 40 CFR Part 61 Subpart M when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR §61.145(b) and shall comply with all other applicable requirements of 40 CFR Part 61 Subpart M.
- 21. Emission Fees: The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).

# **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.

#### SECTION V: STATE ENFORCEABLE TERMS AND CONDITIONS

- A. This Title V permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Energy and Environmental Protection or any federal, local or other state agency. Nothing in this Title V permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- **B.** Nothing in this Title V permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.

#### C. Additional Emissions Units

- 1. The Permittee shall make and submit a written record, at the commissioner's request, within 30 days of receipt of notice from the commissioner, or by such other date specified by the commissioner, of each additional emissions unit or group of similar or identical emissions units at the premises.
- 2. Such record of additional emissions units shall include each emissions unit, or group of emissions units, at the premises which is not listed in Section II.A of this Title V permit, unless the emissions unit, or group of emissions units, is:
  - a. an insignificant emissions unit as defined in RCSA §22a-174-33; or
  - b. an emissions unit or activity listed in *White Paper for Streamlined Development of Part 70 Permit Applications, Attachment A* (EPA guidance memorandum dated July 10, 1995).
- **3.** For each emissions unit, or group of emissions units, on such record, the record shall include, as available:
  - a. Description, including make and model;
  - b. Year of construction/installation or if a group, range of years of construction/installation;
  - c. Maximum throughput or capacity; and
  - d. Fuel type, if applicable.
- **D.** Odors: The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA §22a-174-23.
- **E.** Noise: The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA §§22a-69-1 through 22a-69-7.4, inclusive.

## **Section V: State Enforceable Terms and Conditions**

F.	Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the
	control of HAPs as set forth in RCSA §22a-174-29.

G.	The Permittee shall comply with the requirements for Control of Carbon Dioxide Emissions as set forth in
	RCSA §22a-174-31.

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

### **SECTION VI: TITLE V REQUIREMENTS**

### A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

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

Any document required to be submitted to the commissioner under this Title V permit shall, unless otherwise specified in writing by the commissioner, be directed to: 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: U.S. EPA New England, 5 Post Office Square, Suite 100 (OES04-2), Boston, Massachusetts 02109, Attn: Air Clerk.

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

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

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

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

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

- 1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding 25 million dollars in second quarter 1980 dollars; or
- 2. The delegation of authority to the duly authorized representative has been given in writing by an officer of the corporation in accordance with corporate procedures and the following:
  - i. Such written authorization specifically authorizes a named individual, or a named position, having responsibility for the overall operation of the Title V premises or activity,
  - ii. Such written authorization is submitted to the commissioner and has been approved by the commissioner in advance of such delegation. Such approval does not constitute approval of corporate procedures, and
  - iii. If a duly authorized representative is a named individual in an authorization submitted under subclause ii. of this subparagraph and a different individual is assigned or has assumed the responsibilities of the duly authorized representative, or, if a duly authorized representative is a named position in an authorization submitted under subclause ii. of this subparagraph and a different named position is assigned or has assumed the duties of the duly authorized representative, a new written authorization shall be submitted to the commissioner prior to or together with the submission of any application, document, report or certification signed by such representative.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

This Title V permit shall not be deemed to:

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

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

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

#### N. PERMIT AVAILABILITY

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

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

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

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

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Title V permit.

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

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

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

This Title V permit does not convey any property rights or any exclusive privileges. This Title V permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including CGS §4-181a(b) and RCSA §22a-3a-5(b). This Title V permit shall neither create nor affect any rights of persons who are not parties to this Title V permit.

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

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

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

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

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

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

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

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

#### V. TRANSFERS [RCSA §22a-174-2a(g)]

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

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

### 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).

## 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.

## **Print for Compliance Certification or Enforcement**

Click the button below to generate the appropriate checklist. Be aware that this macro does not work unless you have access to the DEEP D-Drive.

This macro takes anywhere from 2-5 minutes to run. Your computer will look like it is locked up but it is working. Unfortunately the new DEEP virtual computer system makes this process even slower. Please be patient.

Print Enforcement Checklist

Print Compliance Certification