

## 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.

<b>Title V Permit Number</b>	105-0071-TV
<b>Client/Sequence/Town/Premises Numbers</b>	7780/1/105/251
<b>Date Issued</b>	
<b>Expiration Date</b>	

**Corporation:**

Milford Power Company, LLC

**Premises Location:**

55 Shelland Street, Milford, CT 06461

**Name of Responsible Official and Title:**

Gregory Russell, Plant Manager

All the following attached pages, 2 through 37, are hereby incorporated by reference into this Title V permit.

\_\_\_\_\_  
Katherine S. Dykes  
Commissioner

\_\_\_\_\_  
Date

## TABLE OF CONTENTS

	PAGE
<b>List of Abbreviations/Acronyms</b> .....	4
<b>Section I. Premises Information/Description</b>	
A. Premises Information.....	5
B. Premises Description.....	5
<b>Section II. Emissions Units Information</b>	
A. Emissions Units Description - Table II.A.....	6
B. Operating Scenario Identification - Table II.B .....	7
<b>Section III. Applicable Requirements and Compliance Demonstration</b>	
A. GEU-1.....	8
B. GEU-2.....	23
C. EU-6 .....	26
D. Federal Acid Rain Permit Requirements .....	28
E. Premises-Wide General Requirements .....	28
<b>Section IV. Compliance Schedule - Table IV</b> .....	30
<b>Section V. State Enforceable Terms and Conditions</b> .....	31
<b>Section VI. Title V Requirements</b>	
A. Submittals to the Commissioner & Administrator.....	32
B. Certifications [RCSA §22a-174-33(b)].....	32
C. Signatory Responsibility [RCSA §22a-174-2a(a)] .....	32
D. Additional Information [RCSA §§22a-174-33(j)(1)(X), -33(h)(2)].....	33
E. Monitoring Reports [RCSA §22a-174-33(o)(1)] .....	33
F. Premises Records [RCSA §22a-174-33(o)(2)] .....	33
G. Progress Reports [RCSA §22a-174-33(q)(1)].....	34
H. Compliance Certifications [RCSA §22a-174-33(q)(2)].....	34
I. Permit Deviation Notifications [RCSA §22a-174-33(p)] .....	35
J. Permit Renewal [RCSA §22a-174-33(j)(1)(B)].....	35
K. Operate in Compliance [RCSA §22a-174-33(j)(1)(C)] .....	35
L. Compliance with Permit [RCSA §22a-174-33(j)(1)(G)] .....	35
M. Inspection to Determine Compliance [RCSA §22a-174-33(j)(1)(M)].....	35
N. Permit Availability.....	36
O. Severability Clause [RCSA §22a-174-33(j)(1)(R)] .....	36
P. Need to Halt or Reduce Activity [RCSA §22a-174-33(j)(1)(T)] .....	36
Q. Permit Requirements [RCSA §22a-174-33(j)(1)(V)] .....	36
R. Property Rights [RCSA §22a-174-33(j)(1)(W)] .....	36
S. Alternative Operating Scenario Records [RCSA §22a-174-33(o)(3)].....	36
T. Operational Flexibility and Off-Permit Changes [RCSA §22a-174-33(r)(2)] .....	36
U. Information for Notification [RCSA §22a-174-33(r)(2)(A)] .....	37
V. Transfers [RCSA §22a-174-2a(g)] .....	37
W. Revocation [RCSA §22a-174-2a(h)] .....	37
X. Reopening for Cause [RCSA §22a-174-33(s)] .....	37
Y. Credible Evidence.....	37

# DRAFT

## 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

# DRAFT

### *Abbreviation/Acronym*

### *Description*

bhp	brake horsepower
Btu	British Thermal Unit
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitoring
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
EU	Emission Unit
EPA	Environmental Protection Agency
ft	feet
°F	degrees Fahrenheit
gal	gallon
GEU	Grouped Emission Unit
gph	gallons per hour
gpm	gallons per minute
HAP	Hazardous Air Pollutant
hr	hour
HRSG	Heat Recovery Steam Generator
J	Joule
lb	pounds
MACT	Maximum Achievable Control Technology
min	minute
MMBtu	Million British Thermal Units
MMcf	Million cubic feet
MMgal	Million gallons
MW	Megawatt
ng	nanogram
NO <sub>x</sub>	Nitrogen Oxides
NSR	New Source Review
O <sub>2</sub>	Oxygen
PM	Particulate Matter
PM-10	Particulate Matter, < 10 microns in diameter
ppm	parts per million
ppmv	parts per million, volumetric basis
ppmvd	parts per million, volumetric basis, dry
ppmw	parts per million, weight basis
RACT	Reasonably Available Control Technology
RCSA	Regulations of Connecticut State Agencies
RICE	Reciprocating Internal Combustion Engine
scf	standard cubic feet
SCR	Selective Catalytic Reduction
SIC	Source Identification Code
SO <sub>2</sub>	Sulfur Dioxide
SO <sub>x</sub>	Sulfur Oxides
TDS	Total Dissolved Solids
tpy	tons per year
VOC	Volatile Organic Compounds

## Section I: Premises Information/Description

# DRAFT

### A. PREMISES INFORMATION

Nature of Business: Electric Generating Facility  
Primary SIC: 4911 Electric and Other Services Combined

Facility Mailing Address: Milford Power Company, LLC  
55 Shelland Street  
Milford, Connecticut 06461

Telephone Number: (203) 647-1503

### B. PREMISES DESCRIPTION

Milford Power Company, LLC (Permittee) operates two combined cycle, electric generating units at their facility in Milford, CT. The facility consists of two ABB GT-24 combustion turbine trains (nominal output of 544 MW total) each consisting of a combustion turbine, two gas fired inlet chiller engines, a heat recovery steam generator (HRSG) and a steam turbine. A selective catalytic reduction (SCR) system and oxidation catalyst control NO<sub>x</sub> and CO emissions from the combustion turbine and chiller engines for each unit.

Ancillary equipment includes two emergency generators (480 bhp ea.), fire pump (302 bhp) and cooling tower. In addition, there is a No. 2 fuel oil storage tank subject only to premise-wide applicable requirements.

The combustion turbines are subject to the Acid Rain Program (Title IV) and the Title IV requirements are incorporated in this Title V permit.

The facility is not a major source of hazardous air pollutants (HAPs). The emergency diesel generators, diesel fire pump and gas turbine inlet chiller engines are subject to the National Emissions Standards for Hazardous Air Pollutants for Source Categories at 40 CFR Part 63 Subpart ZZZZ for reciprocating internal combustion engines (RICE) located at area sources.

The GT-24 combustion turbines are Clean Air Interstate Rule (CAIR) NO<sub>x</sub> ozone season units subject to the applicable requirements of RCSA §§22a-174-22c, -22e, 40 CFR Part 60 Subpart KKKK and 40 CFR Part 96.

## Section II: Emissions Units Information

# DRAFT

### A. EMISSIONS UNITS DESCRIPTION

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

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION</b>			
<b>Emissions Unit/ Grouped Emissions Unit</b>	<b>Emissions Unit Description</b>	<b>Control Unit Description</b>	<b>Permit or Regulation Number</b>
<b>EU-1</b>	ABB GT-24 combustion turbine train #1 with two natural gas fired chillers (Turbine #1) Turbine MRC: 2.18 MMBtu/hr (gas), 2.095 MMBtu/hr (oil) Chiller MRC: 9,293 scf/hr each Construction Date: 10.25.2000	NO <sub>x</sub> : SCR, Low NO <sub>x</sub> burner CO: oxidation catalyst	P-105-0068 RCSA §22a-174-22c RCSA §22a-174-22e 40 CFR Part 60 Subpart KKKK 40 CFR Part 63 Subpart ZZZZ
<b>EU-2</b>	ABB GT-24 combustion turbine train #2 with two natural gas fired chillers (Turbine #2) Turbine MRC: 2.18 MMBtu/hr (gas), 2.095 MMBtu/hr (oil) Chiller MRC: 9,293 scf/hr each Construction Date: 10.25.2000	NO <sub>x</sub> : SCR, Low NO <sub>x</sub> burner CO: oxidation catalyst	P-105-0069 RCSA §22a-174-22c RCSA §§22a-174-22e 40 CFR Part 60 Subpart KKKK 40 CFR Part 63 Subpart ZZZZ
<b>EU-3</b>	Diesel emergency generator, 480 bhp MRC: 3.24 MMBtu/hr Construction Date: 10.25.2000	None	RCSA §22a-174-3b RCSA §22a-174-22e 40 CFR Part 63 Subpart ZZZZ
<b>EU-4</b>	Diesel emergency generator, 480 bhp MRC: 3.24 MMBtu/hr Construction Date: 10.25.2000	None	RCSA §22a-174-3b RCSA §22a-174-22e 40 CFR Part 63 Subpart ZZZZ
<b>EU-6</b>	10 cell cooling tower MRC: 10 MMacfm Construction Date :10,25.2000	Drift eliminator	P-105-0087
<b>EU-7</b>	Emergency diesel fire pump, 302 bhp MRC: 2.2 MMBtu/hr Construction Date: 10.25.2000	None	RCSA §22a-174-3b 40 CFR Part 63 Subpart ZZZZ
<b>GEU-1</b>	EU-1 and 2	As above	As above
<b>GEU-2</b>	EU-3, 4 and 7	As above	As above

**B. OPERATING SCENARIO IDENTIFICATION**

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

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

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

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

#### A. GEU-1 (EU-1 and EU-2)

**Subject to: P-105-0068, P-105-0069, RCSA §§22a-174-22c, -22e, 40 CFR Part 60 Subpart KKKK, 40 CFR Part 63 Subpart ZZZZ**

#### 1. PM/PM-10/PM-2.5

##### a. Limitation or Restriction

- i. Natural Gas, limits per EU [P-105-0068 and P-105-0069]  
(A)  $\leq 19.9$  lb/hr  
(B)  $\leq 0.0095$  lb/MMBtu heat input
- ii. No. 2 Fuel Oil, limits per EU [P-105-0068 and P-105-0069]  
(A)  $\leq 83.0$  lb/hr  
(B)  $\leq 0.0392$  lb/MMBtu heat input
- iii. Maximum Annual Emissions [P-105-0068 and P-105-0069]  
 $\leq 103.45$  tpy per EU
- iv. Natural Gas and No. 2 Fuel Oil, limit per EU [RCSA §22a-174-18(e)(1)]  
 $\leq 0.1$  lb/MMBtu

##### b. Monitoring Requirements

- i. The Permittee shall conduct particulate matter emissions testing on each unit while firing natural gas once every five years. Testing while firing No. 2 fuel oil shall be performed at least once every five years from the last No. 2 fuel oil emissions test or before 700 hours of operation on No. 2 fuel oil, whichever is longer. Such emissions tests shall be in accordance with an Intent-to-Test protocol submitted by the Permittee and approved by the commissioner. [P-105-0068 and P-105-0069]
- ii. The Permittee shall calculate the monthly and consecutive 12 month PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

##### c. Record Keeping Requirements

- i. The Permittee shall keep records of all emissions testing performed on the turbines and any emission factors utilized to demonstrate compliance with the requirements in Section III.A.1.a of this Title V permit. [P-105-0068 and P-105-0069]
- ii. The Permittee shall record the monthly and consecutive 12 month PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding 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. [P-105-0068 and P-105-0069]

##### 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)]

## Section III: Applicable Requirements and Compliance Demonstration

# DRAFT

### 2. Opacity

#### a. Limitation or Restriction

- i.  $\leq 10\%$  opacity (6-minute block average) during No. 2 fuel oil firing. [P-105-0068 and P-105-0069]
- ii.  $\leq 20\%$  opacity (6-minute block average) [RCSA §22a-174-18(b)(1)(A)]
- iii.  $\leq 40\%$  opacity (1-minute block average) [RCSA §22a-174-18(b)(1)(B)]

#### b. Monitoring Requirements

The Permittee shall operate, calibrate and maintain a CEM system which shall continuously monitor and record the opacity of stack emissions during operations on No. 2 fuel oil.

[P-105-0068, P-105-0069 and RCSA §22a-174-4a]

#### c. Record Keeping Requirements

The Permittee shall maintain all data, documents and reports required by RCSA §22a-174-4a.

[RCSA §22a-174-4a(h)]

#### d. Reporting Requirements

The Permittee shall submit all required reports to the commissioner in accordance with RCSA §22a-174-4a(i). [RCSA §22a-174-4a(i)]

### 3. SO<sub>2</sub>

#### a. Limitation or Restriction

- i. Natural Gas, limits per EU [P-105-0068 and P-105-0069]
  - (A)  $\leq 4.4$  lb/hr
  - (B)  $\leq 0.0021$  lb/MMBtu
- ii. No. 2 Fuel Oil, limits per EU [P-105-0068 and P-105-0069]
  - (A)  $\leq 108.0$  lb/hr
  - (B)  $\leq 0.0515$  lb/MMBtu
- iii. Maximum Annual Emissions [P-105-0068 and P-105-0069]  
 $\leq 55.0$  tpy per EU

#### b. Monitoring Requirements

- i. The Permittee shall install, maintain and operate a monitoring system capable of calculating the hourly SO<sub>2</sub> mass emission rate, consistent with the procedures in Appendix D to 40 CFR Part 75 and shall record the output of the system. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall use data recorded by the SO<sub>2</sub> monitoring system and other pertinent data and records to determine compliance with SO<sub>2</sub> limits. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall calculate the monthly and consecutive 12 month SO<sub>2</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

#### c. Record Keeping Requirements

- i. The Permittee shall keep records of the fuel certification for each delivery of fuel from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by

### Section III: Applicable Requirements and Compliance Demonstration

DRAFT

the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis and the method used to determine the sulfur content of such fuel. [P-105-0068 and P-105-0069]

- ii. The Permittee shall record the monthly and consecutive 12 month SO<sub>2</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

#### 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. NO<sub>x</sub>

#### a. Limitation or Restriction

- i. Natural Gas, limits per EU

(A) ≤ 14.9 lb/hr, 3 hour block average [P-105-0068 and P-105-0069]

(B) ≤ 2.0 ppmvd @ 15% O<sub>2</sub>, 3 hour block average [P-105-0068 and P-105-0069]

(C) ≤ 25 ppmvd @15% O<sub>2</sub>, daily block average  
[RCSA §22a-174-22e(d)(5)]

(D) ≤ 0.15 lb/MMBtu heat input (averaging period Oct 1 to Apr 30, inclusive)  
[RCSA §22a-174-22e(d)(5)]

- ii. No. 2 Fuel Oil, limits per EU

(A) ≤ 47.0 lb/hr [P-105-0068 and P-105-0069]

(B) ≤ 5.9 ppmvd @ 15% O<sub>2</sub>, 3 hour block average [P-105-0068 and P-105-0069]

(C) ≤ 42 ppmvd @15% O<sub>2</sub>, daily block average  
[RCSA §22a-174-22e(d)(5)]

(D) ≤ 0.15 lb/MMBtu heat input (averaging period Oct 1 to Apr 30, inclusive)  
[RCSA §22a-174-22e(d)(5)]

- iii. Transient Operation, limits per EU (Startup, Shutdown, Fuel Switching, Equipment Tuning or Protective Load Shed) [P-105-0068 and P-105-0069]

(A) Startup: ≤ 1720 lb/event

(B) Shutdown: ≤ 530 lb/event

(C) Protective Load Shed: ≤ 2250 lb/event

(D) Fuel Switching and Equipment Tuning: ≤ 1720 lb/event

- iv. Re-commissioning, limit per EU [P-105-0068 and P-105-0069]

≤ 530 lb/hr

- v. Maximum Annual Emissions [P-105-0068 and P-105-0069]

≤ 69.2 tpy per EU

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

#### *b. Monitoring Requirements*

- i. The Permittee shall operate, calibrate and maintain a CEM system that shall continuously monitor and record NO<sub>x</sub> emissions in accordance with RCSA §§22a-174-4a, -22c(i), -22e, 40 CFR Part 60 Subpart KKKK and 40 CFR Parts 72-78, 40 CFR §96.370 and 40 CFR §96.371, as applicable. [P-105-0068 and P-105-0069]
- ii. The Permittee shall monitor and record the SCR aqueous ammonia 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 Section III.A.4.a of this Title V permit. [P-105-0068 and P-105-0069]
- iii. The Permittee shall perform inspections of the SCR catalyst as recommended by the manufacturer. [P-105-0068 and P-105-0069]
- iv. The Permittee shall calculate the monthly and consecutive 12 month NO<sub>x</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

#### *c. Record Keeping Requirements*

- i. The Permittee shall keep documentation of the NO<sub>x</sub> emissions monitoring data on a 3-hr block average basis. [P-105-0068 and P-105-0069]
- ii. The Permittee shall record the monthly and consecutive 12 month NO<sub>x</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]
- iii. The Permittee shall keep records of the inspection and maintenance of the SCR catalyst. The records shall include: [P-105-0068 and P-105-0069]
  - (A) the name of the person;
  - (B) the date;
  - (C) the results or actions; and
  - (D) the date the catalyst is replaced.
- iv. The date and work performed for repairs, replacement of parts and other maintenance. [RCSA §22a-174-22e(j)(2)(B)]
- v. Records of the dates and times of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-22e(j)(2)(C)]
- vi. CEM system records [RCSA §22a-174-22e(j)(2)(D)]:
  - (A) Records of all performance evaluations, calibration checks and adjustments on such monitor,
  - (B) A record of maintenance performed,
  - (C) All data necessary to complete the quarterly reports required under RCSA §22a-174-22e(k)(3), and
  - (D) Charts, electronically stored data, and printed records produced by such CEM system as needed to demonstrate compliance with the requirements of RCSA §22a-174-22e.

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

#### 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 and shall include: [RCSA §22a-174-22e(k)(3)]
  - (A) All daily block average data, in a format acceptable to the commissioner, for the three calendar month period ending the month before the due date of the report;
  - (B) The date and time of commencement and completion of each period of excess emissions;
  - (C) The magnitude and suspected cause of the excess emissions;
  - (D) Actions taken to correct the excess emissions;
  - (E) The date and time when each malfunction of the CEM system commenced and ended;
  - (F) Actions taken to correct each malfunction; and
  - (G) If no excess emissions or CEM system malfunctions occur during a quarter, the owner or operator shall indicate that no excess emissions or malfunctions occurred during the quarter.
- ii. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting any performance or quality assurance testing of any CEM for NO<sub>x</sub>. Any such testing shall be conducted in accordance with a testing protocol approved by the commissioner. Any CEM for NO<sub>x</sub> shall be installed, calibrated and operated in accordance with the performance and quality assurance specifications contained in RCSA §22a-174-4a 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)]
- iii. Not more than 60 days after the completion of a certification test conducted under the requirements of RCSA §22a-174-22e(m), the Permittee shall submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22e(k)(2)]
- iv. 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)]

## 5. VOC

#### a. Limitation or Restriction

- i. Natural Gas, limits per EU [P-105-0068 and P-105-0069]
  - (A) ≤ 3.0 lb/hr (50-74% load, all ambient temperatures)
  - (B) ≤ 2.2 lb/hr (75-99% load, all ambient temperatures)
  - (C) ≤ 3.0 lb/hr (100% load, ambient temperature up to 60°F)
  - (D) ≤ 3.2 lb/hr (100% load, ambient temperature 61-70°F)
  - (E) ≤ 3.7 lb/hr (100% load, ambient temperature 71-80°F)
  - (F) ≤ 7.5 lb/hr (100% load, ambient temperature ≥ 81°F)
- ii. No. 2 Fuel Oil, limits per EU [P-105-0068 and P-105-0069]
  - (A) 75-100% load, ambient temperature 0-59°F: Linear interpolation between 17.2 lb/hr (0°F) and 15.7 lb/hr (59°F)
  - (B) 75-100% load, ambient temperature 60-104°F: Linear interpolation between 15.7 lb/hr (60°F) and 14.3 lb/hr (104°F)

### Section III: Applicable Requirements and Compliance Demonstration

DRAFT

- iii. Transient Operation, limits per EU (Startup, Shutdown, Fuel Switching, Equipment Tuning or Protective Load Shed) [P-105-0068 and P-105-0069]

- (A) Startup:  $\leq 154$  lb/event
- (B) Shutdown:  $\leq 48$  lb/event
- (C) Protective Load Shed:  $\leq 202$  lb/event
- (D) Fuel Switching and Equipment Tuning:  $\leq 154$  lb/event

- iv. Re-commissioning, limit per EU [P-105-0068 and P-105-0069]  
 $\leq 48$  lb/hr

- v. Maximum Annual Emissions [P-105-0068 and P-105-0069]  
 $\leq 24.0$  tpy per EU

#### b. *Monitoring Requirements*

- i. The Permittee shall conduct VOC emissions testing on each unit while firing natural gas once every five years from the date of the last natural gas emissions test. Testing while firing No. 2 fuel oil shall be performed at least once every five years from the date of the last No. 2 fuel oil emissions test or before 700 hours of operation on No. 2 fuel oil, whichever is longer. [P-105-0068 and P-105-0069]
- ii. VOC emissions during transient operations shall be calculated using the most recent stack test data. [P-105-0068 and P-105-0069]
- iii. The Permittee shall calculate the monthly and consecutive 12 month VOC emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

#### c. *Record Keeping Requirements*

- i. The Permittee shall keep records of all emissions testing performed on the turbine and any emission factors utilized to demonstrate compliance with the requirements of Section III.A.5.a of this Title V permit. [P-105-0068 and P-105-0069]
- ii. The Permittee shall keep records of turbine load with ambient temperature. These will be used to determine compliance with VOC emission rates in Section III.A.5.a of this Title V permit. [P-105-0068 and P-105-0069]
- iii. The Permittee shall record the monthly and consecutive 12 month VOC emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

#### 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)]

## 6. CO

#### a. *Limitation or Restriction*

- i. Natural Gas, limits per EU [P-105-0068 and P-105-0069]

### Section III: Applicable Requirements and Compliance Demonstration

DRAFT

- (A)  $\leq 13.0$  lb/hr (100% load)
  - (B)  $\leq 52.0$  lb/hr (50-99% load)
  - ii. No. 2 Fuel Oil, limit per EU [P-105-0068 and P-105-0069]
    - $\leq 20.6$  lb/hr
  - iii. Transient Operation, limits per EU (Startup, Shutdown, Fuel Switching, Equipment Tuning or Protective Load Shed) [P-105-0068 and P-105-0069]
    - (A) Startup:  $\leq 770$  lb/event
    - (B) Shutdown:  $\leq 240$  lb/event
    - (C) Protective Load Shed:  $\leq 1010$  lb/event
    - (D) Fuel Switching and Equipment Tuning:  $\leq 770$  lb/event
  - iv. Re-commissioning, limit per EU [P-105-0068 and P-105-0069]
    - $\leq 240$  lb/hr
  - v. RICE MACT Standard, limit per EU [40 CFR §63.6603(a) and 40 CFR Part 63 Subpart ZZZZ, Tables 5.13, 6.14]
    - $\leq 47$  ppm @ 15% O<sub>2</sub>, 4-hour block average
  - vi. Maximum Annual Emissions [P-105-0068 and P-105-0069]
    - $\leq 212.0$  tpy per EU (50% load, firing natural gas, 8760 hr)
- b. *Monitoring Requirements*
- i. The Permittee shall operate, calibrate and maintain a CEM system that shall continuously monitor and record CO emissions. [P-105-0068 and P-105-0069]
  - ii. The Permittee shall monitor and record the oxidation catalyst operating temperature (°F). The Permittee shall maintain this parameter within the ranges recommended by the manufacturer to achieve compliance with the emission limits in Section III.A.6.a of this Title V permit. [P-105-0068 and P-105-0069]
  - iii. The Permittee shall perform inspections of the oxidation catalyst as recommended by the manufacturer. [P-105-0068 and P-105-0069]
  - iv. Compliance with the CO limit in Section III.A.6.a.v of this Title V permit will be determined using the CO CEMS installed on the combined chiller engine and combustion turbine exhaust stack based on the 4-hour block average emissions. [40 CFR §§63.6625(a), 63.6640(a) and Table 6.3 of 40 CFR Part 63 Subpart ZZZZ]
  - v. The Permittee shall calculate the monthly and consecutive 12 month CO in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]
- c. *Record Keeping Requirements*
- i. The Permittee shall keep documentation of the CO emissions monitoring data on a 1-hr block average basis. [P-105-0068 and P-105-0069]
  - ii. The Permittee shall keep documentation of the CO emissions concentration (ppm @ 15% O<sub>2</sub>) monitoring data on a 4-hour block average basis.

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

[40 CFR §63.6655(d) and Table 6.14 of 40 CFR Part 63 Subpart ZZZZ]

- iii. The Permittee shall keep records of the inspection and maintenance of the oxidation catalyst. The records shall include: [P-105-0068 and P-105-0069]
  - (A) the name of the person;
  - (B) the date;
  - (C) the results or actions; and
  - (D) the date the catalyst is replaced.
- iv. The Permittee shall record the monthly and consecutive 12 month CO emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]
- v. The Permittee shall develop a written startup, shutdown and malfunction plan for the CO CEMS. [40 CFR §§63.8(c)(1)(iii)]

#### *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)]

### **7. Ammonia**

#### *a. Limitation or Restriction*

10 ppmv @ 15% O<sub>2</sub>, 24 hour rolling average per EU [P-105-0068 and P-105-0069]

#### *b. Monitoring Requirements*

The Permittee shall operate, calibrate and maintain a CEM system that shall continuously monitor and record ammonia emissions. [P-105-0068 and P-105-0069]

#### *c. Record Keeping Requirements*

- i. The Permittee shall keep documentation of the ammonia emissions monitoring data on a 24-hr rolling average basis. [P-105-0068 and P-105-0069]
- ii. The Permittee shall keep records of each delivery of aqueous ammonia. The records shall include: [P-105-0068 and P-105-0069]
  - (A) the date of delivery;
  - (B) the name of the supplier;
  - (C) the quantity of aqueous ammonia delivered; and
  - (D) the percentage of ammonia in solution, by weight.

#### *d. Reporting Requirements*

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

**8. Formaldehyde**

*a. Limitation or Restriction*

9.9 tpy (premises-wide limit) [P-105-0068 and P-105-0069]

*b. Monitoring Requirements*

- i. The Permittee shall conduct formaldehyde emissions testing on each unit while firing natural gas once every five years from the date of the last emissions test firing natural gas. Testing while firing No. 2 fuel oil shall be performed at least once every five years from the date of the last emissions test firing No. 2 fuel oil or before 700 hours of operation on No. 2 fuel oil, whichever is longer. Such emissions tests shall be in accordance with an Intent-to-Test protocol submitted by the Permittee and approved by the commissioner. [P-105-0068 and P-105-0069]
- ii. The Permittee shall calculate the monthly and consecutive 12 month formaldehyde emissions in units of tons. Calculations for formaldehyde emissions are to be made on a premises-wide basis. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

*c. Record Keeping Requirements*

- i. The Permittee shall keep records of all emissions testing performed on the turbine and any emission factors utilized to demonstrate compliance with the requirements of Section III.A.8.a of this Title V permit. [P-105-0068 and P-105-0069]
- ii. The Permittee shall record the monthly and consecutive 12 month formaldehyde emissions in units of tons. Calculations for formaldehyde emissions are to be made on a premises-wide basis. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

*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)]

**9. Maximum Fuel Firing Rates and Annual Fuel Consumption**

*a. Limitation or Restriction*

- i. Maximum Natural Gas Firing Rate (MMcf/hr per EU), based on ambient temperature (T) [P-105-0068 and P-105-0069]
  - (A)  $T < 0^{\circ}\text{F}$ : 2.180
  - (B)  $0^{\circ}\text{F} \leq T \leq 100^{\circ}\text{F}$ :  $2.180 - 2.25 \times 10^{-3} \times T$
  - (C)  $T > 100^{\circ}\text{F}$ : 1.955
- ii. Maximum Natural Gas Firing Rate (scf/hr per chiller) [P-105-0068 and P-105-0069]  
9,293
- iii. Maximum No. 2 Fuel Oil Firing Rate (gph per EU), based on ambient temperature (T) [P-105-0068 and P-105-0069]

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

- (A)  $T < 0^{\circ}\text{F}$ : 15,519
- (B)  $0^{\circ}\text{F} \leq T \leq 100^{\circ}\text{F}$ :  $15,519 - 16.67 \times T$
- (C)  $T > 100^{\circ}\text{F}$ : 13,852
- iv. Maximum Natural Gas Annual Consumption  
15,663 MMcf per EU [P-105-0068 and P-105-0069]
- v. Maximum No. 2 Fuel Oil Annual Consumption  
11.08 MMgal per EU [P-105-0068 and P-105-0069]
- vi. Chiller natural gas usage is metered separately from the turbine. The turbine's annual allowance of natural gas includes the chillers' usage.
- b. *Monitoring Requirements*
- i. The Permittee shall operate, calibrate and maintain a continuous monitoring system which shall continuously monitor and record the fuel firing rate of each unit. [P-105-0068 and P-105-0069]
- ii. The Permittee shall use individual non-resettable totalizing fuel metering devices or billing meters to continuously monitor fuel feed to the turbine. [P-105-0068 and P-105-0069]
- iii. Annual fuel consumption shall be calculated by adding the current month's fuel consumption to the previous 11 months' fuel consumption. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iv. The Permittee shall operate, calibrate and maintain a continuous monitoring system which shall continuously monitor and record ambient temperature. [P-105-0068 and P-105-0069]
- v. The Permittee shall operate, calibrate and maintain a continuous monitoring system which shall continuously monitor and record the stack exhaust gas O<sub>2</sub> content. [P-105-0068 and P-105-0069]
- c. *Record Keeping Requirements*
- i. The Permittee shall keep documentation of all measured fuel flow rates on a continuous basis. [RCSA §22a-174-33(j)(1)(X)]
- ii. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption (for each fuel). The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]
- iii. The Permittee shall keep documentation of all measured ambient temperatures on a continuous basis. [RCSA §22a-174-33(j)(1)(X)]
- iv. The Permittee shall keep documentation of all measured stack exhaust O<sub>2</sub> content on a 1-hr block average basis. [RCSA §22a-174-33(j)(1)(X)]
- v. The Permittee shall keep documentation of all calculations and assumptions made in converting recorded data to the units of the limitations in Section III.A.9.a of this Title V permit. [RCSA §22a-174-33(j)(1)(X)]
- vi. The Permittee shall keep documentation of all testing, calibration and maintenance of the monitoring and recording equipment. [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)]

### Section III: Applicable Requirements and Compliance Demonstration

DRAFT

#### 10. Transient Operations (Startup, Shutdown, Fuel Switching, Equipment Tuning, Protective Load Shed and Re-commissioning)

##### a. Limitation or Restriction

- i. Maximum duration of all transient operations except re-commissioning and chiller startup: 240 minutes/event [P-105-0068 and P-105-0069]
- ii. The maximum duration EU-1 or EU-2 may operate at above the normal emission limits during re-commissioning (not including startup and shutdown) is 30 hours. [P-105-0068 and P-105-0069]
- iii. Maximum duration of chiller startup: 30 minutes/startup, time at idle must be minimized. [40 CFR §63.6625(h)]

##### b. Monitoring Requirements

- i. Startup shall be defined as that period of time from initiation of combustion firing until the unit reaches steady state operation. [P-105-0068 and P-105-0069]
- ii. Shutdown shall be defined as that period of time from the initial lowering of the combustion turbine output until the point at which the combustion process has stopped. [P-105-0068 and P-105-0069]
- iii. Re-commissioning shall be defined as the manufacturer's required period of equipment tuning conducted after completion of a major inspection. If the unit is commissioned on more than one fuel, re-commissioning on each fuel shall be considered a separate re-commissioning event. [P-105-0068 and P-105-0069]
- iv. Malfunction shall be defined as any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, process equipment or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance, careless operation or any other preventable upset condition or careless operation are not malfunctions. [P-105-0068 and P-105-0069]
- v. Protective load shed shall be defined as an event during which the emission unit reduces load to less than 50% load without stopping the combustion process, either because of directions from ISO-New England or to protect the turbine. [P-105-0068 and P-105-0069]
- vi. Operating requirements for start-up, shutdown and fuel switching, equipment tuning, protective load shed and re-commissioning periods: [P-105-0068 and P-105-0069]
  - (A) The frequency and duration of operation during these periods shall be minimized to the maximum extent practicable;
  - (B) All possible steps shall be taken to minimize the impact of emission during these periods;
  - (C) At all times, the turbine shall be operated in a manner consistent with good engineering practice for minimizing emissions and the Permittee shall have the best efforts regarding planning, design and operating procedures to meet the otherwise applicable emission limitation; and
  - (D) The Permittee's actions during these periods shall be documented by properly signed, contemporaneous operating logs or other relevant evidence.

##### c. Record Keeping Requirements

- i. The Permittee shall keep documentation of the emissions and duration of each startup, shutdown, fuel switching, equipment tuning, protective load shed and re-commissioning event. [P-105-0068 and P-105-0069]
- ii. The Permittee shall develop a written startup, shutdown and malfunction plan for the chiller engines [40 CFR §63.6(e)(3)]
- iii. The Permittee shall keep records of the occurrence and duration of any start-up, shutdown, or

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

malfunction in the operation of the stationary gas turbine; 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)]

- (A) type of event (start-up, 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.

#### 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)]

### 11. Maximum Gross Heat Input

#### a. Limitation or Restriction

- i. Maximum Gross Heat Input, Natural Gas firing (MMBtu/hr per EU), based on ambient temperature (T) and a fuel heating value of 1,000 Btu/scf [P-105-0068 and P-105-0069]
  - (A)  $T < 0^{\circ}\text{F}$ : 2,180
  - (B)  $0^{\circ}\text{F} \leq T \leq 100^{\circ}\text{F}$ :  $2,180 - 2.25 \times T$
  - (C)  $T > 100^{\circ}\text{F}$ : 1,955
- ii. Maximum Gross Heat Input, No. 2 Fuel Oil firing (MMBtu/hr per EU), based on ambient temperature (T) and a fuel heating value of 135,000 BTU/gal [P-105-0068 and P-105-0069]
  - (A)  $T < 0^{\circ}\text{F}$ : 2,095
  - (B)  $0^{\circ}\text{F} \leq T \leq 100^{\circ}\text{F}$ :  $2,095 - 2.25 \times T$
  - (C)  $T > 100^{\circ}\text{F}$ : 1,872
- iii. Maximum Allowable Heat Rate on a 12 month rolling basis (MMBtu/kWh net): 7,573

#### b. Monitoring Requirements

The Permittee shall calculate heat input and monitor net electrical output to perform heat rate calculations. [P-105-0068 and P-105-0069]

#### c. Record Keeping Requirements

- i. The Permittee shall keep documentation of the calculations required to demonstrate compliance with the maximum gross heat input limitations in Section III.A.11.a of this Title V permit. [P-105-0068 and P-105-0069]
- ii. The Permittee shall keep records of turbine heat rate on a 12 month rolling average basis. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0068 and P-105-0069]

### Section III: Applicable Requirements and Compliance Demonstration

# DRAFT

#### d. Reporting Requirements

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

## 12. Fuel Sulfur Content

#### a. Limitation or Restriction

No. 2 Fuel Oil: 0.05% by weight, dry basis [P-105-0068 and P-105-0069]

#### b. Monitoring Requirements

i. The Permittee may elect not to monitor the sulfur content of the fuel fired if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. The Permittee shall use one of the following sources of information to make the required demonstration. [40 CFR §60.4365]

(A) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil is 0.05 weight percent (500 ppmw), the total sulfur content of natural gas is 20 grains of sulfur or less per 100 standard cubic feet, has potential sulfur emissions of less than 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input; or

(B) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR Part 75.

ii. The frequency of determining the sulfur content of the fuel shall be as follows [40 CFR §60.4370]:

(A) For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D of 40 CFR Part 75 (ie., flow proportional sampling from the units' storage tank, or sampling each delivery prior to combining it with the fuel oil already in the intended storage tank).

(B) For gaseous fuel, if the Permittee elects not to demonstrate sulfur content using the options in Section III.A.12.b.i of this Title V permit and if the gaseous fuel is supplied without intermediate bulk storage, the sulfur content of the gaseous fuel shall be determined and recorded once per unit operating day.

(C) The Permittee may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the source and the characteristics of the fuel supply. The custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in 40 CFR §60.4330.

(D) The two custom sulfur monitoring schedules provided in 40 CFR §60.4370(c)(1) are acceptable without prior Administrative approval.

(E) The Permittee may use the data collected from the 720-hr sulfur sampling demonstration described in section 2.3.6 of Appendix D of 40 CFR Part 75 to determine a custom sulfur sampling schedule.

#### c. Record Keeping Requirements

i. The Permittee shall keep documentation of fuel sulfur content monitoring data obtained in accordance with Section III.A.12.b of this Title V permit. [RCSA §22a-174-33(j)(1)(X)]

### Section III: Applicable Requirements and Compliance Demonstration

DRAFT

- ii. The Permittee shall keep documentation of all calculations and assumptions made in converting recorded data to the units of the limitations in Section III.A.12.a of this Title V permit. [RCSA §22a-174-33(j)(1)(X)]
- 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 delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P-105-0068 and P-105-0069]

#### 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)]

### 13. 40 CFR Part 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

#### a. Limitation or Restriction

- i. NO<sub>x</sub> emissions shall not exceed 15 ppm @ 15% O<sub>2</sub> (30 unit operating day rolling average) from each unit in GEU-01 when firing natural gas. [40 CFR §63.4320(a), P-105-0068 and P-105-0069]
- ii. NO<sub>x</sub> emissions shall not exceed 42 ppm @ 15% O<sub>2</sub> (30 unit operating day rolling average) from each unit in GEU-01 when firing No. 2 fuel oil. [40 CFR §63.4320(a), P-105-0068 and P-105-0069]
- iii. NO<sub>x</sub> emissions shall not exceed 96 ppm @ 15% O<sub>2</sub> (30 unit operating day rolling average) from each unit in GEU-01 when firing natural gas or distillate fuel oil and operating at less than 75% of peak load. [40 CFR §63.4320(a), P-105-0068 and P-105-0069]
- iv. SO<sub>2</sub> emissions shall not exceed 0.060 lb/MMBtu heat input from each turbine in GEU-01 when firing natural gas or distillate fuel oil. [40 CFR §63.4330(a)(2)]

#### b. Monitoring Requirements

- i. The Permittee shall operate and maintain the stationary combustion turbines, duct burners, 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. [40 CFR §60.4333(a)]
- ii. The Permittee shall install, calibrate, maintain and operate continuous emission monitoring as described in 40 CFR §§60.4335(b) and 60.4345. [40 CFR §60.4340(b)]
- iii. The NO<sub>x</sub> diluent CEMS required by this permit, which is installed and certified in accordance with 40 CFR Part 75, is acceptable for use under Subpart KKKK. [40 CFR §60.4345(a)]
- iv. The Permittee may satisfy the quality assurance plan requirements of Subpart KKKK by using the QAQC program and plan described in section 1 appendix B to 40 CFR Part 75. [40 CFR §60.4345(e)]
- v. The Permittee is exempt from the total sulfur content fuel monitoring requirements in 40 CFR §60.4360 as long as the Permittee can demonstrate that the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for each fuel, specifying that the maximum total sulfur content for oil is 0.05 weight percent or less, the total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet, and each unit in GEU-01 has potential sulfur emissions of less than 0.060 lb SO<sub>2</sub>/MMBtu heat input. [40 CFR §60.4365(a)]

### Section III: Applicable Requirements and Compliance Demonstration

DRAFT

*c. Record Keeping Requirements*

- i. The Permittee shall keep records of the data from the NO<sub>x</sub> CEM demonstrating continuous compliance with Sections III.A.13.a.i through iii of this Title V permit. [RCSA §22a-174-33(j)(l)(K)(ii)]
- ii. The Permittee shall keep records of the current, valid purchase contract, tariff sheet or transportation contract for each fuel as specified in Section III.A.12.b of this Title V permit in order to demonstrate compliance with Section III.A.14.a.iv of this Title V permit. [40 CFR §60.4365(a)]

*d. Reporting Requirements*

The Permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR §60.7(c) and must be postmarked by the 30<sup>th</sup> day following the end of each six-month period. Excess emissions must be reported for all periods of unit operation, including startup, shutdown, and malfunction. Procedures to use data from the NO<sub>x</sub> CEM equipment to identify excess emissions are described in 40 CFR §60.4350 and excess emissions and monitor downtime for NO<sub>x</sub> and SO<sub>2</sub> are defined in 40 CFR §§60.4380 and 60.4385, respectively. [40 CFR §63.4375(a); 40 CFR §63.4395]

#### 14. Operation and Maintenance Requirements, Exceedances and Malfunctions

*a. Limitation or Restriction*

- i. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [P-105-0068 and P-105-0069]
- 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 start-up, shutdown, and malfunction. [P-105-0068 and P-105-0069]
- iii. The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants. [P-105-0068 and P-105-0069]
- iv. The Permittee shall immediately institute shutdown of the turbine in the event a malfunction cannot be corrected within three hours. [P-105-0068 and P-105-0069]

*b. Monitoring Requirements*

Record keeping specified in Section III.A.14.c. of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(l)(K)(ii)]

*c. Record Keeping Requirements*

- i. The Permittee shall keep records of all exceedances of any emissions limitation or operating parameter. Such records shall include: [P-105-0068 and P-105-0069]
  - (A) the date and time of the exceedance;
  - (B) a detailed description of the exceedance; and
  - (C) the duration of the exceedance.

*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: [P-105-0068 and P-105-0069]

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

(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 or the air pollution control equipment. The Permittee shall submit such notification within ten days of the malfunction. The notification shall include the following:  
[P-105-0068 and P-105-0069]

(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.

#### **B. GEU-2 (EU-3, 4) – Diesel Generators (480 bhp ea.) and EU-7 Emergency Diesel Fire Pump (302 bhp) Subject to: RCSA §§22a-174-3b, -22e (EU-3 and EU-4 only), 40 CFR Part 63 Subpart ZZZZ**

##### **1. Hours of Operation and Fuel Consumed**

###### *a. Limitation or Restriction*

i. Operating hours of each emergency engine in GEU-2 shall not exceed 300 hours during any 12 month rolling aggregate and each emergency engine shall be operated only during periods of testing and scheduled maintenance or during an emergency as defined in RCSA §22a-174-22e.  
[RCSA §22a-174-3b(e)(2)(A)] [State-only Requirement]

ii. For any nongaseous fuel consumed in each engine in GEU-2, the Permittee shall comply with the fuel sulfur content requirements of RCSA §22a-174-19b(d)(2) of the Regulations of Connecticut State Agencies. [RCSA §22a-174-3b(e)(2)(B)] [State-only Requirement]

iii. For EU-3 and EU-4 only, the owner or operator of an emergency engine shall not operate the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to unhealthy for sensitive groups” or greater. If, subsequent to the initial forecast of “moderate to unhealthy for sensitive groups” or greater, the forecast is revised to “moderate” or lower, the owner or operator is no longer prohibited from operating the engine for routine, scheduled testing or maintenance for the remainder of that day. An owner or operator of an emergency engine may rely on an ozone forecast of “moderate” or lower obtained after 3 p.m. on the preceding day. Subsequent changes to the ozone forecast after 3 p.m. that forecast ozone levels of “moderate to unhealthy for sensitive groups” or greater shall not obligate the owner or operator to refrain from operation of the emergency engine at the facility on the following day. [RCSA §22a-174-22e(d)(14)]

###### *b. Monitoring and Testing Requirements*

i. The Permittee shall properly maintain each unit and operate the unit in accordance with RCSA §22a-174-3b. [RCSA §22a-174-3b(e)(4)] [State-only Requirement]

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

iv. The Permittee shall operate and maintain each unit according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the emissions unit in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

v. The Permittee shall install a non-resettable hour meter on each unit if one is not already installed.  
[40 CFR §63.6625(f)]

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

- vi. The Permittee shall minimize each emissions unit's time spent at idle during startup and minimize the emissions unit's startup time to a period needed for appropriate and safe loading of the emissions unit, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. [40 CFR §63.6625(h)]
  - vii. The Permittee shall change oil and filter on each unit every 500 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ, Table 2d.4]
  - viii. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR Part 63 Subpart ZZZZ, Table 2d.4. The oil analysis must be performed every 500 hours of operation or annually, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee shall change the oil within two days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee shall change the oil within two days or before commencing operation, whichever is later. [40 CFR §63.6625(i)]
  - ix. The Permittee shall inspect the air cleaner on each unit every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63 Subpart ZZZZ, Table 2d.4]
  - x. The Permittee shall inspect all hoses and belts on each unit every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63 Subpart ZZZZ, Table 2d.4]
  - xi. The Permittee may operate each emissions unit for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of each unit is limited to 100 hours per year. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of each emissions unit beyond 100 hours per year. [40 CFR §63.6640(f)(2)(i)]
  - xii. The Permittee may operate each emissions unit for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR §63.6640(f)(4)]
- c. *Record Keeping Requirements*
- i. The Permittee shall maintain records of hours of operation for each unit in GEU-2 on a monthly basis and a 12 month rolling aggregate. Maximum annual operating hours shall be based on any consecutive 12 month time period and shall be determined by adding each month's operating hours to that of the previous 11 months. [RCSA §22a-174-3b(e)(4)] [State-only Requirement]
  - ii. The Permittee shall keep records of the sulfur content of the fuel combusted and the quantity purchased for combustion. A written certification or a written contract with a fuel supplier is sufficient to satisfy this requirement if the certification or contract identifies: [RCSA §22a-174-3b(h)] [State-only Requirement]; RCSA §22a-174-19b(g)(3)
    - (A) The name of the fuel seller;
    - (B) The type of fuel purchased;

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

- (C) The sulfur content of the fuel purchased; and
  - (D) The method used to determine the sulfur content of the fuel purchased.
  - iv. For EU-3 and EU-4 only, the Permittee shall keep the date and work performed for repairs, replacement of parts and other maintenance. [RCSA §22a-174-22e(j)(2)]
  - v. The Permittee shall keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for each emissions unit. The analysis program must be part of the maintenance plan for the emissions unit. [40 CFR §63.6625(i)]
  - vi. The Permittee shall maintain a copy of each notification and report that is submitted to comply with 40 CFR Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv). [40 CFR §63.6655(a)(1)]
  - vii. The Permittee shall keep records of the maintenance conducted on each emissions unit in order to demonstrate that the unit was operated and maintained according to the maintenance plan. [40 CFR §63.6655(e)]
  - viii. The Permittee shall keep records of the hours of operation of each emissions unit that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the emissions units are used for demand response operation, the Permittee shall keep records of the notification of the emergency situation, and the time the emissions unit was operated as part of demand response. [40 CFR §63.6655(f)]
  - ix. The Permittee shall keep records in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1). Each record shall be readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1). [40 CFR §§63.6660(a), (b), & (c)]
- d. *Reporting Requirements*
- i. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]
  - ii. The Permittee shall report each instance in which an operating limitation in Table 2d of 40 CFR Part 63 Subpart ZZZZ was not met. These instances are deviations from the operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.6650. [40 CFR §63.6640(b)]
  - iii. If an emissions unit is operating during an emergency and it is not possible to shut down the emissions unit in order to perform the management practice requirements on the schedule, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The Permittee shall report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR Part 63 Subpart ZZZZ, Table 2d, footnote 2]

**C. EU-6 (Cooling Tower)**

**Subject to: P-105-0087**

**1. PM and PM-10 Emissions**

*a. Limitation or Restriction*

- i. 10.9 lb/hr PM [P-105-0087]
- ii. 22.34 tpy PM [P-105-0087]
- iii. 5.8 lb/hr PM-10 [P-105-0087]
- iv. 14.89 tpy PM-10 [P-105-0087]

*b. Monitoring Requirements*

- i. The Permittee shall inspect the suction screen, distribution system and nozzles weekly for clogging. [P-105-0087]
- ii. The Permittee shall inspect the drift eliminators and the fill monthly for clogging. [P-105-0087]
- iii. The Permittee shall clean the drift eliminators, fill, suction screen, distribution system and nozzles as required by the manufacturer. [P-105-0087]
- iv. The Permittee shall operate and maintain the cooling tower and all associated equipment as recommended by the manufacturer and in accordance with the facility's Operations and Maintenance plan. [P-105-0087]

*c. Record Keeping Requirements*

- i. The Permittee shall keep documentation of the calculations of actual particulate matter emissions of this EU shall be made on a daily, monthly and annual basis. Documentation in support of any assumptions or data used in these calculations shall be maintained. Such calculations shall be based on the following equations: [P-105-0087]

$$(A) E_{\text{particulate}} (\text{lb/hr}) = \text{Water Circulation Flow Rate (gpm)} \times 0.0005 (\% \text{Drift}) / 100 \times \text{TDS (ppmw)} / 1,000,000 \times 8.34 (\text{lb/gal, water density}) \times 60 (\text{min/hr})$$

$$(B) \text{PM (lb/hr)} = E_{\text{particulate}} \times 75\%$$

$$(C) \text{PM-10 (lb/hr)} = E_{\text{particulate}} \times 40\%$$

- ii. The Permittee shall keep records of annual emissions of PM and PM-10 calculated by adding the current month's emissions to the previous 11 months' emissions. The Permittee shall make these calculations within 30 days of the end of the previous month. [P-105-0087]
- iii. The Permittee shall keep maintenance records as detailed in Section III.C.1.b of this Title V permit. [P-105-0087]

*d. Reporting Requirements*

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

**2. Water Circulating Flow Rates (Design Specifications)**

*a. Limitation or Restriction*

Equipment design specification flow rates based on number of pumps operating. [P-105-0087]

### Section III: Applicable Requirements and Compliance Demonstration

DRAFT

- i. 1 pump operating: 32,500 gpm
- ii. 2 pumps operating: 90,000 gpm
- iii. 3 pumps operating: 115,000 gpm
- iv. 4 pumps operating: 132,200 gpm

b. *Monitoring Requirements*

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

c. *Record Keeping Requirements*

The Permittee shall make and maintain the following:

- i. Documentation of the number of pumps in operation shall be kept on a daily basis. [P-105-0087]

d. *Reporting Requirements*

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

### 3. TDS

a. *Limitation or Restriction*

- i. Range: 18,760-44,000 ppmw [P-105-0087]
- ii. Maximum Daily Average: 44,000 ppmw [P-105-0087]

b. *Monitoring Requirements*

- i. The Permittee shall continuously monitor the TDS concentration of the cooling water using a conductivity meter. [P-105-0087]
- ii. The conductivity reading shall be converted to TDS concentration in ppmw. [P-105-0087]
- iii. The conductivity meter shall be calibrated once annually or as recommended by the manufacturer. [P-105-0087]

c. *Record Keeping Requirements*

The Permittee shall make and maintain the following records:

- i. Documentation of the daily average TDS concentration. [P-105-0087]
- ii. Documentation in support of any assumptions made in these calculations. [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)]

**D. FEDERAL ACID RAIN PERMIT REQUIREMENTS**

**Federal Acid Rain Permit Requirements**

**1. SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for Each Affected Unit**

*a. EU-1 (Turbine #1) and EU-2 (Turbine #2)*

		2026	2027	2028	2029	2030
EU-1 and EU-2 (Turbine #1 and Turbine #2)	SO <sub>2</sub> Allowances under Tables 2, 3 or 4 of 40 CFR Part 73	0	0	0	0	0
	NO <sub>x</sub> Limit	Not an Affected Unit under 40 CFR Part 76				

**2. Phase II Acid Rain Permit Application**

The attached Phase II Acid Rain Permit Application is hereby incorporated by reference into this Title V permit. If this Title V permit is in conflict with or inconsistent with the Phase II Acid Rain Permit Application, the Title V permit requirements, including any applicable requirement under 40 CFR Parts 72 through 78, inclusive, shall supersede the Phase II Acid Rain Permit Application and the Permittee shall be governed by and adhere to this Title V permit and any applicable requirement under 40 CFR Parts 72 through 78, inclusive.

**E. 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-174-4a(b)(1).
- 2. Emission Testing:** The Permittee shall comply with the procedures for sampling, emission testing, sample analysis, and reporting as set forth in RCSA §22a-174-5.
- 3. Emergency Episode Procedures:** The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
- 4. Reporting of Malfunctioning Control Equipment:** The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
- 5. Prohibition of Air Pollution:** The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
- 6. Public Availability of Information:** The public availability of information shall apply, as set forth in RCSA §22a-174-10.
- 7. Prohibition Against Concealment/Circumvention:** The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
- 8. Violations and Enforcement:** The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
- 9. Variances:** The Permittee may apply to the commissioner for a variance from one or more of the provisions of these regulations as set forth in RCSA §22a-174-13.
- 10. No Defense to Nuisance Claim:** The Permittee shall comply with the regulations as set forth in RCSA §22a-

### Section III: Applicable Requirements and Compliance Demonstration

**DRAFT**

174-14.

- 11. Severability:** The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
- 12. Responsibility to Comply:** The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
- 13. Particulate Emissions:** The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18.
- 14. Fuel Sulfur Content:** The Permittee shall not use No. 2 heating oil that exceeds fifteen parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(B) .
- 15. Sulfur 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.
- 16. 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.
- 17. Organic Compound Emissions:** The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
- 18. Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22e and §22a-174-22f.
- 19. 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).
- 20. Open Burning:** The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
- 21. 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.
- 22. Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
- 23. CAIR NO<sub>x</sub> Ozone Season Trading:** The ABB GT-24 turbine trains (EU-1 and EU-2) are CAIR NO<sub>x</sub> Ozone season units and therefore subject to RCSA §22a-174-22c. The units shall comply with all applicable requirements stated in RCSA §22a-174-22c and the standard requirements of the CAIR permit application.

**Section IV: Compliance Schedule**

**DRAFT**

No steps are required for achieving compliance at this time.

## Section V: State Enforceable Terms and Conditions

**DRAFT**

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. Hazardous Air Pollutants (HAPs):** The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- F.** The Permittee shall comply with the requirements for Control of Carbon Dioxide Emissions as set forth in RCSA §22a-174-31.

## Section VI: Title V Requirements

**DRAFT**

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

### SECTION VI: TITLE V REQUIREMENTS

#### A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

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

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

Any submittal to the Administrator of the Environmental Protection Agency shall be submitted per the procedure required by the applicable requirement or otherwise in a computer-readable format and addressed to: Director, Enforcement and Compliance Assurance Division, U.S. EPA Region I, 5 Post Office Square, Suite 100 (Mailcode: 04-02), Boston, Massachusetts 02109-3912, Attn: Air Compliance Clerk.

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

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

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

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

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

## Section VI: Title V Requirements

**DRAFT**

1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding 2.5 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

## Section VI: Title V Requirements

**DRAFT**

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

## Section VI: Title V Requirements

# DRAFT

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.

## Section VI: Title V Requirements

# DRAFT

### **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).

## Section VI: Title V Requirements

**DRAFT**

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.

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