



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

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

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

Title V Permit Number	034-0004-TV
Client/Sequence/Town/Premises Numbers	558/2/34/2
Date Issued	October 24, 2014
Modification Issue Date	March 24, 2016
Expiration Date	October 24, 2019

Corporation:

Algonquin Gas Transmission, LLC

Premises Location:

539 Tower Hill Road, Chaplin, CT 06235

Name of Responsible Official and Title:

Mr. Thomas V. Wooden, Jr., Vice President, Field Operations

All the following attached pages, 2 through 36, are hereby incorporated by reference into this Title V permit.

/s/ Anne Gobin for
Robert Klee
Commissioner

March 24, 2016
Date

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Title V Operating Permit

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

LIST OF ABBREVIATIONS/ACRONYMS

<i>Abbreviation/Acronym</i>	<i>Description</i>
ASC	Allowable Stack Concentration
bhp	Brake horse power hour
Btu/hp-hr	British Thermal Unit per horse power hour
C	Condensable
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
EU	Emissions Unit
EPA	Environmental Protection Agency
F	Filterable
°F	Degree Fahrenheit
GEU	Grouped Emissions Unit
GHG	Green House Gases
HAP	Hazardous Air Pollutant
hp	Horse power
hr	Hour
lb	Pound
MASC	Maximum Allowable Stack Concentration
MMBtu	Million British Thermal Unit
MMsft ³	Million standard cubic feet
NO _x	Nitrogen Oxides
NWS	National Weather Service
O ₂	Oxygen
P	Permit
Pb	Lead
PM _{2.5}	Particulate Matter less than 2.5 microns
PM ₁₀	Particulate Matter less than 10 microns
ppmvd	Parts per million, volumetric basis dry
RCSA	Regulations of Connecticut State Agencies
RICE	Reciprocating Internal Combustion Engine
scft	Standard Cubic feet
scf/hr	Standard Cubic Feet per Hour
SIC	Standard Industrial Code
SO _x	Sulfur Oxides
SO ₂	Sulfur Dioxide
STD	Standard
TPY	Tons per year
VOC	Volatile Organic Compound

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: transports natural gas via pipeline
Primary SIC: 4922

Facility Contact and Mailing Address:
Mr. Reagan M. Mayces
Algonquin Gas Transmission, LLC
P.O. Box 1642
Houston, TX 77251-1642

Telephone Number: (713) 627-4790

B. PREMISES DESCRIPTION

Algonquin Gas Transmission, LLC (Algonquin) transports natural gas via underground pipeline from New Jersey through southern New England to eastern Massachusetts or in reverse. At several points along the pipeline, the gas must be recompressed to ensure that it continues to move along the pipeline and can be delivered to customers at serviceable pressures. Gas is compressed at the Chaplin Compressor Station using two gas-fired turbine driven centrifugal compressors. The natural gas used to fuel the gas-fired units is supplied from Algonquin's pipeline.

The Chaplin compressor station is a Title V source located in an ozone non-attainment area as defined in the RCSA §22a-174-1. The Chaplin Compressor Station is considered a major source for NO_x and CO.

The main Emissions Units include the following:

- Two Solar Mars T-7000 turbines;
- One Solar Taurus 60-7802 turbine;
- One Waukesha VGF36GL (880 bhp) natural gas fired emergency generator; and
- One 3.25 MMBtu/hr Cummins emergency generator.

Additionally, there are Emissions Units with premises wide applicable requirements:

- One Cameron 0.404 MMBtu/hr heat input natural gas fired fuel gas heater;
- One 1.1 MMBtu/hr Kewanee glycol heater;
- One 2,940 gallon condensate tank;
- One remote reservoir parts washer;
- Natural gas pipeline fugitive and blowdown venting, and
- Pipeline condensate truck loading fugitives.

Section II: Emissions Units Information

A. EMISSIONS UNITS DESCRIPTION

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

TABLE II.A: EMISSIONS UNITS DESCRIPTION			
Emissions Unit	Emissions Unit Description	Control Unit Description	Permit or Regulation Number
EU-1	Solar Natural Gas-Fired Turbine, Model T-7000, 61.48 MMBtu/hr Maximum Gross Heat Input @ 50 °F, 60,275 scft/hr Maximum Fuel Firing Rate @ 50 °F, <i>Conversion factor: 8,713 Btu/hp-hr</i> ID # TCSBAA-1500-210 Constructed: November 1994	Dry low NOx combustor	P 034-0001 Revision Issue Date: March 2016 RCSA §22a-174-22 40 CFR Part 60 Subpart GG
EU-2	Solar T-7000 Natural Gas-Fired Turbine, 61.48 MMBtu/hr Maximum Gross Heat Input @ 50 °F, 60,275 scft/hr Maximum Fuel Firing Rate @ 50 °F, <i>Conversion factor: 8,713 Btu/hp-hr</i> ID # TCSBAA-1500-210 Constructed: November 1994	Dry low NOx combustor	P 034-0002 Revision Issue Date: March 2016 RCSA §22a-174-22 40 CFR Part 60 Subpart GG
EU-3	Cummins 440 hp Emergency Engine Generator, 3.25 MMBtu/hr <i>Conversion factor: 7,384 Btu/hp-hr</i> Model # GTA-19 Constructed: October 1994	None	RCSA §22a-174-3b(e) RCSA §22a-174-22 40 CFR Part 63 Subpart ZZZZ
EU-4	Solar Taurus 60-7802 Natural Gas-Fired Turbine, 74.91 MMBtu/hr Maximum Gross Heat Input, 73,444 scft/hr Maximum Fuel Firing Rate; <i>Conversion Factor: 8,713 Btu/hp-hr</i> Constructed: June 2015	Oxidation Catalyst, SoLoNOx	P 034-0006 Issue Date: December 22, 2014 RCSA §22a-174-22 40 CFR Part 60 Subpart KKKK
EU-5	Waukesha VGF36GL 880 bhp Natural Gas-Fired Emergency Generator	None	RCSA §22a-174-3b(e) RCSA §22a-174-22 40 CFR Part 60 Subpart JJJJ

Section II: Emissions Units Information

B. OPERATING SCENARIO IDENTIFICATION

The Permittee shall be allowed to operate under the following Standard Operating Scenarios without notifying the commissioner, provided that such operations are explicitly provided for and described in this section.

Natural gas fired turbines: the standard use of the turbines is to compress natural gas.

Emergency engine: the standard use of the emergency engine is to provide emergency power for operations at the facility in case of utility power outage, brownout, maintenance or other emergency.

C. GROUPED EMISSIONS UNITS DESCRIPTION

TABLE I.C: GROUPED EMISSIONS UNITS DESCRIPTION	
Grouped Emissions Units (GEU)	Grouped Emissions Unit Description
GEU-1	EU-1 and EU-2: Two Solar gas turbines
GEU-2	EU-3 and EU-5: Two emergency engines

Section III: Applicable Requirements and Compliance Demonstration

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

A. GROUPED EMISSIONS UNIT 1 (GEU-1: EU-1 and EU-2): Two Solar Gas Turbines

Classification:

- Two Solar gas turbines
- Operating under Permit Nos. 034-0001 and 034-0002
- Subject to RCSA §22a-174-22
- Subject to 40 CFR Part 60 Subpart GG

1. Fuel Type, Fuel Consumption and Fuel Sulfur Content

a. Limitation or Restriction

- i. Fuel Type: Natural gas [Permit Nos. 034-0001, 034-0002]
- ii. Maximum Fuel Consumption: 528 MMscf over any consecutive 12 months *for each turbine*. [Permit Nos. 034-0001, 034-0002]
- iii. Fuel Sulfur Content (% by weight, dry basis): 20 grains/100scf [Permit Nos. 034-0001, 034-0002, 40 CFR §60.33(u)]

b. Monitoring Requirements

The Permittee shall use gas metering devices to continuously monitor fuel feed to each turbine to show compliance with the limits in Section III.A.1.a of this Title V permit. [Permit Nos. 034-0001, 034-0002]

c. Record Keeping Requirements

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption in units of standard cubic feet. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit Nos. 034-0001, 034-0002]
- ii. The Permittee shall keep records of a current valid purchase contract, tariff sheet or transportation contract which demonstrates the maximum total sulfur content of the natural gas burned in the combustion turbine. [Permit Nos. 034-0001, 034-0002]
- iii. The Permittee shall keep on site records indicating compliance with the monitoring/sampling requirements of 40 CFR §60.334. [40 CFR §60.334]
- iv. The Permittee shall keep all records required by this Title V permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit Nos. 034-0001, 034-0002]

Section III: Applicable Requirements and Compliance Demonstration

d. Reporting Requirements

The Permittee shall submit annual emission inventory statements as requested by the commissioner. [Permit Nos. 034-0001, 034-0002]

2. PM₁₀, SO_x, VOC and CO

a. Limitation or Restriction

Note: The allowable emission limits are for each turbine.

i. The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time: [Permit Nos. 034-0001, 034-0002]

(A) Turbine Inlet Temperature above 0 °F

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

Criteria Pollutants	lb/hr
PM ₁₀	0.43
SO _x	0.22
VOC	0.40
CO	7.18

(B) Annual Emission Limits

Criteria Pollutants	TPY
PM ₁₀	1.8
SO _x	1.0
VOC	1.7
CO	29.5

(C) Startup and Shutdown Emission Limits

Pollutants	Startup Emissions (lb/event)^{(1)&(2)}	Shutdown Emissions (lb/event)^{(1)&(2)}
CO	89.34	39.88

(1) The startup/shutdown values were calculated using Solar information and adjusted to account for site specific temperature, flowrate and startup/shutdown information.

(2) The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints:

- lb/event means “one startup” or “one shutdown;”
- The duration of startup shall not exceed 10 minutes for a hot, warm or cold startup;
- The duration of shutdown shall not exceed 10 minutes; and
- Emissions during these periods shall be counted towards the annual emission limits stated herein.

Section III: Applicable Requirements and Compliance Demonstration

b. Monitoring Requirements

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

c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀, SO_x, VOC and CO emissions, including startup and shutdown, in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month’s emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant.
[Permit Nos. 034-0001, 034-0002]
- ii. The Permittee shall demonstrate compliance with the emission limits in Section III.A.2.a. of this Title V permit by calculating the emission rates using the most recent approved stack test results for that pollutant, or if unavailable, emission factors from the following sources:
[Permit Nos. 034-0001, 034-0002]

(A) Turbine Inlet Air Temperatures above 0 °F

Criteria Pollutants	Emission factor	Source for Emission Factor
PM ₁₀	6.73 lb/MMscf	AP42- Table 3.1-2a (4/00)
SO _x	3.47 lb/MMscf	AP42 – Table 3.1-2a (4/00)
VOC	6.27 lb/MMscf	AP42 – Table 3.1-2a (4/00), adjusted with Manufacturer’s Data
CO	111.66 lb/MMscf	Manufacturer’s Data

(B) Startup/Shutdown

Criteria Pollutants	Emission factor	Source for Emission Factor
CO	Startup: 89.34 lb/event	Emission factors were calculated using Solar information and best engineering judgment.
	Shutdown: 39.88 lb/event	

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

- iii. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the stationary gas turbine; or any malfunction of the air pollution control equipment [40 CFR §60.7(b)]. Such records shall contain the following information:
[Permit Nos. 034-0001, 034-0002]
 - (A) type of event (startup, shutdown, or malfunction);
 - (B) equipment affected;
 - (C) date of event;
 - (D) duration of event (minutes);

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- (E) fuel being used during event; and
 - (F) total CO emissions emitted (lb) during the event.
- iv. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit Nos. 034-0001, 034-0002]

d. Reporting Requirements

- i. The Permittee shall submit annual emission inventory statements requested by the commissioner. [Permit Nos. 034-0001, 034-0002]
- ii. The Permittee shall notify the commissioner in writing of a deviation from an emission limit (short-term and/or long term) or operational parameter, used as a surrogate, as follows: [Permit Nos. 034-0001, 034-0002]
 - (A) For any regulated air pollutant (other than HAP) or operating parameter, no later than ten days after such exceedance commenced.
 - (B) The notification shall include the following:
 - (1) a description of the circumstances surrounding the cause or likely cause of such deviation;
 - (2) a description of all corrective actions and preventive measures taken and/or planned with respect to such deviation and the dates of such actions and measures;
 - (3) the quantity of excess emissions occurring during the event; and
 - (4) the duration of the event.

3. NO_x

a. Limitation or Restriction

Note: The allowable emission limits are for each turbine.

- i. The Permittee shall not exceed the emission limits stated herein at any time. [Permit Nos. 034-0001, 034-0002]
 - (A) Turbine Inlet Temperature above 0 °F
These short term emission limits do not apply during periods of startup and shutdown, unless otherwise noted.

Criteria Pollutant	lb/hr	lb/MMBtu	ppmvd@ 15% O₂
NO _x	9.91	0.15	42.0

(B) Annual Emissions Limit

Criteria Pollutant	TPY
NO _x	40.7

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(C) Startup and Shutdown Emission Limits

Criteria Pollutant	Startup Emissions (lb/event) ^{(1)&(2)}	Shutdown Emissions (lb/event) ^{(1)&(2)}
NOx	0.92	0.44

- (1) The startup/shutdown values were calculated using Solar information and adjusted to account for site specific temperature, flowrate and startup/shutdown information.
- (2) The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints:
- lb/event means “one startup” or “one shutdown;”
 - The duration of startup shall not exceed 10 minutes for a hot, warm or cold startup;
 - The duration of shutdown shall not exceed 10 minutes; and
 - Emissions during these periods shall be counted towards the annual emission limits stated herein.

b. *Monitoring and Testing Requirements*

Note: The Permittee is not required to monitor the nitrogen content of the fuel since the Permittee uses an F-value equal to zero to calculate STD in 40 CFR §60.332. [40 CFR §60.334(h)(2)]

The Permittee shall conduct recurrent stack testing for NOx within five years from the previous stack test to demonstrate compliance with the limits in Section III.A.3.a of this Title V Permit. [Permit Nos. 034-0001, 034-0002]

c. *Record Keeping Requirements*

- i. The Permittee shall calculate and record the monthly and consecutive 12 month NOx emissions, including startup and shutdown, 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 NOx. [Permit Nos. 034-0001, 034-0002]
- ii. The Permittee shall demonstrate compliance with the emission limits in Section III.A.3.a of this Title V permit by calculating the emission rates using the most recent approved stack test results for that pollutant, or if unavailable, emission factors from the following sources: [Permit Nos. 034-0001, 034-0002]

(A) Turbine Inlet Air Temperatures above 0 °F

Criteria Pollutants	Emission factor	Source for Emission Factor
NOx	154.07 lb/MMscf	Manufacturer’s Data

(B) Startup/Shutdown

Criteria Pollutant	Emission factor	Source for Emission Factor
NOx	Startup: 0.92 lb/event	Emission factors were calculated using Solar information and best engineering judgment
	Shutdown: 0.44 lb/event	

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

- iii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance. [RCSA §22a-174-22(l)(1)(D)]
- iv. The Permittee shall keep records of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
- v. The Permittee shall keep records of procedures for calculating NO_x emission rates. [RCSA §22a-174-22(l)(1)(G)]
- vi. The Permittee shall keep records of the dates, times and places of all emission testing required by RCSA §22a-174-22(l), 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-174-22(l)(1)(H), Permit Nos. 034-0001, 034-0002]
- vii. The Permittee shall keep records of any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(J)]
- viii. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the stationary gas turbine; or any malfunction of the air pollution control equipment [40 CFR §60.7(b)]. Such records shall contain the following information: [Permit Nos. 034-0001, 034-0002]
 - (A) type of event (startup, shutdown, or malfunction);
 - (B) equipment affected;
 - (C) date of event;
 - (D) duration of event (minutes);
 - (E) fuel being used during event; and
 - (F) total NO_x emissions emitted (lb) during the event.
- ix. The Permittee shall keep records of manufacturer's information for the low NO_x burner. [Permit Nos. 034-0001, 034-0002]
- x. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit Nos. 034-0001, 034-0002]

d. Reporting Requirements

- i. The Permittee shall submit annual emission inventory statements requested by the commissioner. [Permit Nos. 034-0001, 034-0002]
- ii. Within 30 days of the completion of emission tests conducted under the requirements of RCSA §22a-174-22(k)(1), the Permittee shall submit a written report of the results of such testing to the

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commissioner. [RCSA §22a-174-22(1)(2)]

- iii. The Permittee shall notify the commissioner in writing of a deviation from an emission limit (short-term and/or long term) or operational parameter, used as a surrogate, as follows: [Permit Nos. 034-0001, 034-0002]
 - (A) For any regulated air pollutant (other than HAPs) or operating parameter, no later than ten days after such exceedance commenced.
 - (B) The notification shall include the following:
 - (1) a description of the circumstances surrounding the cause or likely cause of such deviation;
 - (2) a description of all corrective actions and preventive measures taken and/or planned with respect to such deviation and the dates of such actions and measures;
 - (3) the quantity of excess emissions occurring during the event; and
 - (4) the duration of the event.

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

a. Limitation or Restriction

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous Air Pollutant (HAP) emitted and listed in RCSA §22a-174-29. [Permit Nos. 034-0001, 034-0002]

b. Monitoring Requirements

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

c. Record Keeping Requirements

The Permittee shall make and keep records of the Allowable Stack Concentration (ASC) and MASC calculations for each of the turbines to show compliance with RCSA §22a-174-29. [Permit Nos. 034-0001, 034-0002]

d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of a deviation from an emission limit (short-term and/or long term) or operational parameter, used as a surrogate, as follows: [Permit Nos. 034-0001, 034-0002]
 - (A) For any hazardous air pollutant, no later than 24 hours after such exceedance commenced.
 - (B) The notification shall include the following:
 - (1) a description of the circumstances surrounding the cause or likely cause of such deviation;
 - (2) a description of all corrective actions and preventive measures taken and/or planned with respect to such deviation and the dates of such actions and measures;
 - (3) the quantity of excess emissions occurring during the event; and

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(4) the duration of the event.

B. GROUPED EMISSIONS UNIT 2 (GEU-2: EU-3 and EU-5):

EU-3: 440 bhp Cummins Emergency Engine

EU-5: 880 bhp Waukesha Emergency Engine

Classification:

- Emergency engine operating under RCSCA §22a-174-3b(e)
- Subject to RCSCA §22a-174-22
- **EU-3:** Subject to 40 CFR Part 63 Subpart ZZZZ
- **EU-5:** Subject to 40 CFR Part 60 Subpart JJJJ

1. Operational Restrictions, Maximum Hours of Operation and Fuel Sulfur Content

a. Limitation or Restriction

- i. The Permittee shall only operate the emergency engine as an emergency engine as defined in RCSCA §22a-174-22. [RCSCA §§22a-174-22(a)(4) and 22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall not allow the emergency engine to operate except during periods of testing and scheduled maintenance or during an emergency and unless the following conditions are met: [RCSCA §22a-174-3b(e)(2)]
 - (A) The Permittee shall operate the emergency engine for a maximum of 300 hours during any 12 month rolling aggregate. [RCSCA §22a-174-3b(e)(2)(C)]
 - (B) Any non-gaseous fuel consumed by each engine shall not exceed the sulfur content of motor vehicle diesel fuel where “motor vehicle diesel fuel” is defined in RCSCA §22a-174-42. [RCSCA §22a-174-3b(e)(2)(D), 40 CFR §60.4207(b)]
 - (C) The Permittee is expressly prohibited from operating 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,” “unhealthy for sensitive groups,” “unhealthy,” or “very unhealthy” unless it meets the requirements of RCSCA §22a-174-22(b)(3). [RCSCA §22a-174-22(b)(3)]

b. Monitoring Requirements

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

c. Record Keeping Requirements

The Permittee shall make and keep the following records:

- i. Hours of operation for each month and each 12 month rolling aggregate. [RCSCA §22a-174-3b(e)(4)]
- ii. Any of the records listed below are sufficient to demonstrate the sulfur content of fuel used: [RCSCA §§22a-174-3b(h)(1) thru (3)]
 - (A) A fuel certification for a delivery of non-gaseous fuel from a bulk petroleum provider;

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- (B) A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
 - (C) A copy of the current contract with the fuel supplier supplying the fuel as a condition of each shipment.
- iii. All records above shall be maintained for a period of five years and made available to the commissioner to inspect and copy upon request. [RCSA §22a-174-3b(e)(3)]

d. Reporting Requirements

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

2. NO_x

a. Limitation or Restriction

This emergency engine does not have emission limits for NO_x. However there are Record Keeping and Monitoring Requirements. [RCSA §22a-174-22(l)]

b. Monitoring Requirements

This emergency engine is exempt from the emission testing and monitoring requirements of RCSA §22a-174-22. Record keeping specified in Section III.B.2.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §§22a-174-33(j)(1)(K)(ii) and 22a-174-22]

c. Record Keeping Requirements

- i. The Permittee shall make and keep the following records for a minimum of five years; commencing on the date such records were created: [RCSA §22a-174-33(o)(2)]
 - (A) Daily records of operating hours of each engine, identifying the operating hours of emergency and non-emergency use. [RCSA §22a-174-22(l)(1)(A), 40 CFR §60.4214(b)]
 - (B) Records of all tune ups, repairs, replacement of parts and other maintenance. [RCSA §22a-174-22(l)(1)(D)]
 - (C) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
 - (D) Any other record or report required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(J)]

d. Reporting Requirements

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,

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whichever is the earlier. [RCSA §22a-174-33(j)(1)(X)]

3. 40 CFR Part 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EU-3 ONLY)

Classification:

- EU-3: 440 hp
- Engine Category: Emergency Reciprocating Internal Combustion Engine

- Existing Stationary Engine located at an Area Source of HAPs, constructed before June 12, 2006. The emergency engine is not contractually obligated to be used in Emergency Demand Response (EDR) or for local reliability criteria per 40 CFR §63.6585(f).
- *The Permittee should re-evaluate the requirements of 40 CFR Part 63 Subpart ZZZZ if any of the above conditions change.*

a. Limitation or Restriction

- i. The Permittee may operate the emergency stationary RICE for any combination of the following purposes for a maximum of 100 hours per calendar year. [40 CFR §63.6640(f)(2)]
 - (A) Emergency stationary RICE may be operated for maintenance check and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance check and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (B) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5% or greater below standard voltage or frequency.

Note:

- The Permittee must maintain compliance with these operating limitations in order to be considered an emergency engine and maintain exemption from other requirements of 40 CFR Part 63 Subpart ZZZZ.
- The 100 hours and any additional approved time used for maintenance checks and readiness testing as described in Section III.B.3.a.i of this Title V permit shall be counted towards the hours of operation in Section III.B.1.a of this Title V permit.

b. Monitoring Requirements

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

c. Record Keeping Requirements

- i. The Permittee must keep records of the operation of the engine in emergency and non-emergency service through the non-resettable hour meter. The Permittee must record the time of operation for

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the engine and the reason the engine was in operation during that time.
[40 CFR §63.6655(f)]

- ii. The Permittee shall keep records of the notification of the emergency situation, date, start time and end time of the engine's operation where there is a deviation of voltage or frequency of 5% or greater below standard voltage or frequency. [40 CFR §63.6655(f)]

d. Reporting Requirements

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

4. 40 CFR Part 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EU-5 ONLY)

Classification:

- EU-5: 880 bhp Waukesha
- Non-certified engine
- Emergency Spark Ignition Engine constructed after June 12, 2006 where the engine was manufactured on or after January 1, 2009
- Pursuant to 40 CFR §63.6590(c), EU-5 meets the requirements of 40 CFR Part 63 Subpart ZZZZ by complying with 40 CFR Part 60 Subpart JJJJ.
- *The Permittee should re-evaluate the requirements of 40 CFR Part 60 Subpart JJJJ if any of the above conditions change.*

a. Limitation or Restriction

- i. The emission rate of NO_x, CO and VOC discharged to the atmosphere from the stationary internal combustion engine shall not exceed the respective emission limitation specified in 40 CFR §60.4233(e) Table 1. [40 CFR §60.4233]

NO_x: 2.0 g/hp-hr (160 ppmvd@15% O₂)
CO: 4.0 g/hp-hr (540 ppmvd@15% O₂)
VOC: 1.0 g/hp-hr (86 ppmvd@ 15% O₂)

- ii. The Permittee shall operate and maintain the engine to achieve the emission standards as required in 40 CFR §60.4233 over the entire life of the engine. [40 CFR §60.4234]
- iii. The Permittee may operate the emergency stationary RICE for any combination of the following purposes for a maximum of 100 hours per calendar year: [40 CFR §§60.4243(d)(i) and (iii)]
 - (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency engine beyond 100 hours per calendar year.
 - (B) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5% or greater below standard voltage or frequency.

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- iv. Emergency stationary RICE may be operated for up to 50 hours per calendar year in nonemergency situations. The 50 hours of operation in nonemergency are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR §60.4243(d)(3)]
- v. The Permittee shall install a non-resettable hour meter. [40 CFR §60.4237(a)]

Note:

- The Permittee must maintain compliance with these operating limitations in order to be considered an emergency engine and maintain exemption from other requirements of 40 CFR Part 60 Subpart JJJJ.
- The 100 hours and any additional approved time used for maintenance checks and readiness testing as described in Section III.B.4.a.iii of this Title V permit shall count towards the hours of operation in Section III.B.1.a.ii of this Title V permit.

b. Monitoring and Testing Requirements

The Permittee shall conduct an initial performance test within one year of engine startup. Subsequent performance testing shall be conducted every 8,760 hours or three years, whichever comes first, thereafter to demonstrate compliance. Emission testing shall comply with the requirements of 40 CFR §60.4244. [40 CFR §60.4244]

c. Record Keeping Requirements

- i. The Permittee shall comply with all record keeping requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart JJJJ, Table 3. [40 CFR §60.4246]
- ii. The Permittee shall keep records of maintenance conducted on the engine. [40 CFR §60.4245(a)(2)]
- iii. The Permittee shall keep documentation from the manufacturer to demonstrate compliance with the emissions standards in Sections III.B.4.a of this Title V permit. [40 CFR §60.4245(a)(4)]
- iv. The Permittee shall keep records of the hours of operation of the engine that are recorded using a non- resettable hour meter. [40 CFR §60.4245(b)]
- v. The Permittee shall keep records of all notifications submitted to comply with 40 CFR Part 60 Subpart JJJJ and all documentation supporting any notification. [40 CFR §60.4245]

d. Reporting Requirements

The Permittee shall comply with all reporting requirements of the General Provisions in 40 CFR §§60.1 through 60.19, inclusive, as specified in 40 CFR Part 60 Subpart JJJJ, Table 3. [40 CFR §60.4246]

C. EMISSIONS UNIT 4 (EU-4): Solar Taurus T-7802 Turbine

Classification:

- Solar Gas Turbine
- Operating under Permit No. 034-0006

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- Subject to RCSA §22a-174-22
- Subject to 40 CFR Part 60 Subpart KKKK

1. Fuel Type, Fuel Consumption and Fuel Sulfur Content

a. Limitation or Restriction

- i. Fuel type: Natural Gas [Permit No. 034-0006]
- ii. Maximum Fuel Consumption: 592.230 MMscf over any consecutive 12 months [Permit No. 034-0006]
- iii. Fuel Sulfur Content: 20 grains/100 scf [Permit No. 034-0006, 40 CFR §60.4365(a)]

b. Monitoring Requirements

The Permittee shall use gas metering devices to continuously monitor fuel feed to the turbine to show compliance with the maximum fuel consumption limit. [Permit No. 034-0006]

c. Record Keeping Requirements

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption in units of standard cubic feet. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 034-0006]
- ii. The Permittee shall keep records of a current, valid purchase contract, tariff sheet, or transportation contract which demonstrates the maximum total sulfur content of the natural gas burned in the combustion turbine. [Permit No. 034-0006, 40 CFR §60.4365(a)]
- iii. The Permittee shall keep records of all exceedances of any operating parameter. Such records shall include: [Permit No. 034-0006]
 - (A) the date and time of the exceedance;
 - (B) a detailed description of the exceedance;
 - (C) the duration of the exceedance; and
 - (D) reason and corrective action taken.
- iv. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 034-0006]

d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an operating parameter, and shall identify the cause or likely cause of such exceedance, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows: [Permit No. 034-0006]

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

2. PM/PM₁₀/PM_{2.5}, SO₂, NO_x, VOC, CO and GHG

a. Limitation or Restriction

- i. Short Term Emission Limits: These short emission limits do not apply during periods of startup and shutdown, unless otherwise noted. [Permit No. 034-0006]

- (A) Turbine Inlet Temperatures above 0 °F

Pollutant	lb/hr	lb/MMBtu	ppmvd@15% O ₂
PM/PM ₁₀ /PM _{2.5}	0.48	0.0066	
SO ₂	0.25		
VOC	0.25		
NO _x	2.38	0.032	9.0
CO	0.20		25

- (B) Turbine Inlet Temperatures between 0 °F and -20 °F

Pollutant	lb/hr
PM/PM ₁₀ /PM _{2.5}	0.49
SO ₂	0.25
VOC	0.52
NO _x	11.4
CO	0.82

- (C) Turbine Inlet Temperatures Below -20 °F

Pollutant	lb/hr
PM/PM ₁₀ /PM _{2.5}	0.49
SO ₂	0.25
VOC	0.77
NO _x	32.5
CO	1.24

- (D) Startup and Shutdown Emission Limits (at all temperatures)

Pollutant	Startup Emissions (lb/event) ^{(1)&(2)}	Shutdown Emissions (lb/event) ^{(1)&(2)}
NO _x	0.80	0.38
CO	77.3	1.74 ⁽³⁾

- (1) The startup/shutdown values were calculated using Solar information and adjusted to account for site specific temperature, flowrate and startup/shutdown information.
- (2) The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints:
 - The oxidation catalyst shall not be bypassed during startup or shutdown;

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- lb/event means “one startup” or “one shutdown;”
- The duration of startup shall not exceed 10 minutes for a hot, warm or cold startup;
- The duration of shutdown shall not exceed 10 minutes; and
- Emissions during these periods shall be counted towards the annual emission limits stated herein.

(3) The shutdown emission limit takes into account the destruction efficiency of 95%.

(E) Annual Emission Limits

Pollutant	Tons per 12 Consecutive Months
PM/PM ₁₀ /PM _{2.5}	1.99
SO ₂	1.03
VOC	1.26
CO	16.76
NO _x	9.96
GHG	35,800

- ii. The Permittee shall demonstrate compliance with the emission limits in Section III.C.2.a of this Title V permit by calculating the emission rates using the most recent approved stack test results for that pollutant, or if unavailable, emission factors from the following sources: [Permit No. 034-0006]

(A) Turbine Inlet Air Temperatures above 0 °F

Criteria Pollutant	Emission Factor	Source
PM/PM ₁₀ /PM _{2.5} Filterable (F) + Condensable (C)	F: 1.9E-03 lb/MMBtu C: 4.7E-03 lb/MMBtu	AP42, Section 3.1, Table 3.1-2a (April 2000)
NO _x (Before initial stack testing)	32.97 lb/MMscf	Manufacturer’s information
CO (Before initial stack testing)	2.79 lb/MMscf	Manufacturer’s information
VOC (Before initial stack testing)	3.49 lb/MMscf	Manufacturer’s information
SO ₂	0.94 x S lb/MMBtu Where S: percent sulfur in fuel	AP42, Section 3.1, Table 3.1-2a (April 2000)

(B) Turbine Inlet Air Temperatures Between 0 °F and -20 °F

Criteria Pollutant	Emission Factor	Source
PM/PM ₁₀ /PM _{2.5}	0.49 lb/hr	Emission factors were calculated using Solar information and best engineering judgment.
NO _x	11.4 lb/hr	
CO	0.82 lb/hr	
VOC	0.52 lb/hr	
SO ₂	0.25 b/hr	

(C) Turbine Inlet Air Temperatures Below -20 °F

Criteria Pollutant	Emission Factor	Source
PM/PM ₁₀ /PM	0.49 lb/hr	Emission factors were calculated using Solar information and best engineering judgment.
NO _x	32.5 lb/hr	
CO	1.24 lb/hr	
VOC	0.77 lb/hr	
SO ₂	0.25 b/hr	

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(D) Startup and Shutdown

Criteria Pollutant	Startup Emission Factor	Shutdown Emission Factor	Source
NOx	0.78 lb/event	0.38 lb/event	Emission factors were calculated using Solar information and best engineering judgment.
CO	74.9 lb/event	1.71 lb/event	

- iii. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the emission limits in Section III.C.2.a of this Title V permit, as allowed by state or federal statute, law or regulation. [Permit No. 034-0006]
- iv. The Permittee shall perform inspections of the oxidation catalysts as recommended by the manufacturer. [Permit No. 034-0006]

b. Monitoring and Testing Requirements

- i. The Permittee shall continuously monitor the oxidation catalyst inlet temperature (°F). The Permittee shall maintain this parameter within the ranges recommended by the manufacturer to achieve compliance with the emission limits in this permit. [Permit No. 034-0006]
- ii. The Permittee shall conduct initial stack testing for PM, PM₁₀/PM_{2.5} (filterable + condensable), NOx, CO and VOC within 60 days of achieving the maximum production rate, but not later than 180 days after initial startup. The Permittee shall submit test results within 60 days after completion of testing. [Permit No. 034-0006, 40 CFR §60.4400]
- iii. Recurrent stack testing for NOx, CO and VOC shall be performed within five years from the previous stack test to demonstrate compliance with their respective limits. [Permit Nos. 034-0006]
- iv. Annual/biennial stack testing for NOx shall be performed to demonstrate compliance with the NOx emission limits in accordance with 40 CFR §60.4400. [Permit No. 034-0006, 40 CFR §66.400]

c. Record Keeping Requirements

- i. The Permittee shall continuously record the oxidation catalyst inlet temperature (°F). The Permittee shall maintain this parameter within the ranges recommended by the manufacturer to achieve compliance with the emission limits in this permit. [Permit No. 034-0006]
- ii. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM₁₀, PM_{2.5}, SO₂, NOx, VOC and CO emissions, including startup and shutdown, in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No.034-0006]

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- iii. The Permittee shall keep records of turbine inlet air temperature on a basis no less frequent than hourly while the turbine is operating during the months in which low ambient temperature are within the realm of reasonability (October, November, December, January, February and March). The Permittee may utilize ambient temperature monitoring data recorded at the nearest observing station which collects National Weather Service (NWS) data for data substitution purposes should the monitoring and recording system which is integral to the turbine malfunction. [Permit No. 034-0006]
- iv. The Permittee shall keep records of the hours of operation when the turbine inlet air is equal to or below 0 °F and greater than -20 °F. [Permit No. 034-0006]
- v. The Permittee shall keep records of the hours of operation when the turbine inlet air is below -20 °F. [Permit No. 034-0006]
- vi. The Permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the stationary gas turbine; or any malfunction of the air pollution control equipment [40 CFR §60.7(b)]. Such records shall contain the following information: [Permit No. 034-0006, 40 CFR §60.7(b)].
 - (A) type of event (startup, shutdown, or malfunction);
 - (B) equipment affected;
 - (C) date of event;
 - (D) duration of event (minutes);
 - (E) fuel being used during event; and
 - (F) total NO_x and CO emissions emitted (lb) during the event.
- vii. The Permittee shall keep records of the inspection and maintenance of the oxidation catalysts. The records shall include: [Permit No. 034-0006]
 - (A) the name of the person conducting the inspection or maintenance;
 - (B) the date;
 - (A) the results or actions; and
 - (D) the date the catalyst is replaced.
- viii. The Permittee shall keep records of the emissions of this turbine during the initial shakedown period. Emissions during shakedown shall be calculated using good engineering judgment and the best data and methodology available for estimating such emissions. Emissions during shakedown shall be counted towards the annual emission limitation in Section III.C.2.a.i (E) of this Title V permit. [Permit No. 034-0006]

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- ix. The Permittee shall keep records of stack testing results. [Permit No. 034-0006]
- x. The Permittee shall keep records of manufacturer's information for the catalytic oxidizer and SoLoNOx. [Permit No. 034-0006]
- xi. The Permittee shall keep all records required by this Title V permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 034-0006]

d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an operating parameter, and shall identify the cause or likely cause of such exceedance, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:
[Permit No. 034-0006]

For any regulated air pollutant (other than HAPs) 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: [Permit No. 034-0006]
 - (A) a description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction; and
 - (B) a description of all corrective actions and preventive measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.
- iii. The Permittee shall submit the above notifications to the Supervisor of the Compliance Analysis & Coordination Unit, Enforcement Section, Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.
[Permit No. 034-0006]

3. Hazardous Air Pollutants (HAPs)

a. Limitation or Restriction

The Permittee shall not allow this equipment to cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. [Permit No. 034-0006] **STATE ONLY REQUIREMENT**

b. Monitoring and Testing Requirements

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

c. Record Keeping Requirements

The Permittee shall make and keep records of the Allowable Stack Concentration (ASC) and MASC calculations for the turbine to show compliance with RCSA §22a-174-29. [Permit No. 034-0006]

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d. Reporting Requirements

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

D. PREMISES-WIDE GENERAL REQUIREMENTS

Premises-Wide General Requirements

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

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- 14. Organic Compound Emissions:** The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
- 15. Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22.
- 16. Ambient Air Quality:** The Permittee shall not cause or contribute to a violation of an ambient air quality standard as set forth in RCSA §22a-174-24(b).
- 17. Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).

Section IV: Compliance Schedule

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

Section V: State Enforceable Terms and Conditions

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

State Enforceable Terms and Conditions

- A.** This Title V permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Energy and Environmental Protection or any federal, local or other state agency. Nothing in this Title V permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this Title V permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- C. 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. Maximum throughput or capacity; and
 - c. Fuel type, if applicable.
- D. Odors:** The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA §22a-174-23.
- E. Noise:** The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA §§22a-69-1 through 22a-69-7.4, inclusive.
- F. Hazardous Air Pollutants (HAPs):** The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- G. Open Burning:** The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).

Section V: State Enforceable Terms and Conditions

State Enforceable Terms and Conditions

- H.** Fuel Sulfur Content
 1. For the period beginning July 1, 2014 and ending June 30, 2018, the Permittee shall not use No. 2 heating oil that exceeds five hundred parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(A); and
 2. On or after July 1, 2018, 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) .
- I.** 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.
- J.** 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

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.

Title V Requirements

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

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

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

Any submittal to the Administrator of the Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; EPA Region 1; 5 Post Office Square, Suite 100; Mail Code OEP05-02; Boston, Massachusetts 02109-3912.

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

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

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

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

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

1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding 25 million dollars in second quarter 1980 dollars; or

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

This Title V permit shall not be deemed to:

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

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

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

N. PERMIT AVAILABILITY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

V. TRANSFERS [RCSA §22a-174-2a(g)]

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

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

W. REVOCATION [RCSA §22a-174-2a(h)]

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

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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.