



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.

<b>Title V Permit Number</b>	075-0244-TV
<b>Client/Sequence/Town/Premises Numbers</b>	5772/01/075/766
<b>Original Issued Date</b>	November 1, 2010
<b>Revised Issue Date</b>	March 13, 2014
<b>Expiration Date</b>	November 1, 2015

**Corporation:**

Capitol District Energy Center Cogeneration Associates

**Premises location:**

490 Capitol Avenue, Hartford, CT 06106

**Name of Responsible Official and Title:**

John R. Bobenic – Maxim Power Corporation, President and CEO

All the following attached pages, 2 through 62 are hereby incorporated by reference into this Title V permit.

/s/ Anne Gobin  
Rob Klee  
Interim Commissioner

March 13, 2014  
Date

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## List of Abbreviations/Acronyms

<i>Abbreviation/Acronym</i>	<i>Description</i>
AOS	Alternative Operating Scenario
CAIR	Clean Air Interstate Rule
CAIR NATS	CAIR NO <sub>x</sub> Ozone Season Allowance Tracking System
CAS	Chemical Abstracts Service
cf	Cubic Feet
CEMS	Continuous Emission Monitor System
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
DEEP	Department of Energy and Environmental Protection
DERC	Discrete Emission Reduction Credit
EU	Emission Unit
EPA	Environmental Protection Agency
gal	Gallon
GEU	Grouped Emission Unit
gpm	Gallons per minute
HAP	Hazardous Air Pollutant
hr	Hour
H <sub>2</sub> SO <sub>4</sub>	Sulfuric Acid
ISO	International Organization for Standardization
lb	Pound
MACT	Maximum Achievable Control Technology
MASC	Maximum Allowable Stack Concentration
ng/J	Nanograms per Joule
NO <sub>x</sub>	Nitrogen Oxides
O <sub>2</sub>	Oxygen
NSR	New Source Review
Order	Trading Agreement & Order
Pb	Lead
PM-10	Particulate Matter less than 10 microns
ppmvd	Parts per million, volumetric basis
RATA	Relative Accuracy Test Audit
RCSA	Regulations of Connecticut State Agencies
SIC	Source Identification Code
SOS	Standard Operating Scenario
tpy	Tons per year
TSP	Total Suspended Particulate
VOC	Volatile Organic Compound

## Definitions

**Allowable Emission Limit (AEL):** the applicable NO<sub>x</sub> emission limit set forth in RCSA §22a-174-22(e) or RCSA §22a-174-22(f) corresponding to the emission unit described in Table 1 of Order 8298.

**Allowance:** CAIR NO<sub>x</sub> Ozone Season allowance originally allocated to a CAIR NO<sub>x</sub> Ozone Season unit, as defined in RCSA §22a-174-22c, located in the State of Connecticut or a NO<sub>x</sub> allowance designated specifically for compliance during Ozone Season control periods and allocated to a CAIR NO<sub>x</sub> Ozone Season unit located in the State of Connecticut after the date of issuance of Order 8298.

**CAIR NATS:** “CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System” as defined in 40 CFR §96.302.

**CAIR NO<sub>x</sub> Ozone Season unit:** shall be as defined in RCSA §22a-174-22c.

**Continuous emissions monitoring system or CEMS** means the equipment used to sample, analyze, and measure pollutant emissions to provide a permanent record of such emissions expressed in pounds per MMBtu and in tons per day. The following systems are component parts of a CEMS:

- (A) Pollutant concentration monitor;
- (B) Diluent gas monitor (oxygen or carbon dioxide);
- (C) A data acquisition and handling system; and
- (D) Flow monitoring systems (where appropriate).

**Discrete Emission Reduction Credit (DERC):** a unit that was generated and approved by the Commissioner in accordance with a Trading Agreement and Order issued by the Commissioner or generated and approved by the Commissioner in accordance with a protocol submitted and approved pursuant to RCSA §22a-174-38. Such unit is equivalent to 1 ton of NO<sub>x</sub> emissions and may be used for emissions trading in accordance with RCSA §22a-174-22(j), subject to the provisions of Part B of Order 8298.

**Malfunction** means any sudden and unavoidable failure of the air pollution control equipment or process equipment or of a process to operate in a normal manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable condition or breakdown shall not be considered malfunctions.

**Non-Ozone Season:** the period of consecutive calendar months between two successive Ozone Seasons

**Ozone Season:** May 1 through September 30 of each calendar year or such period as defined by the U.S. Environmental Protection Agency, subsequent to the issuance of Order 8298.

**Startup** shall be defined as that period of time from initiation of combustion turbine firing until the unit reaches steady-state operation.

**Shutdown** shall be defined as the period of time from the initial lowering of turbine output to when the combustion process has stopped.

## **Title V Permit**

**All conditions in Sections III through V, VII, and VIII of this 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 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 through VIII (except Section VI) of this Title V permit in accordance with the Clean Air Act, as amended.**

## Section I: Premises Information/Description

### A. PREMISES INFORMATION

Nature of Business: Electricity and steam generation  
Primary SIC: 4911

Facility Mailing Address: Capitol District Energy Center Cogeneration Associates  
490 Capitol Avenue  
Hartford, CT 06106

Telephone Number: (860) 293-1990

### B. PREMISES DESCRIPTION

Capitol District Energy Center Cogeneration Associates (CDECCA), a subsidiary of Maxim Power (USA), Inc, began commercial operation of the Capitol District Energy Center (CDEC) on February 2, 1989. CDECCA is a combined-cycle cogeneration plant producing electricity and thermal products through a simple topping cycle. The facility consists of a General Electric model PG 6531(Frame 6) combined cycle gas turbine generator with an in-line duct burner, a three pressure waste heat boiler, a condensing/extraction steam turbine, two 900-ton two-stage absorption chillers, two 1800-ton centrifugal chillers, a diesel starter engine, a feed water pump engine and two package boilers to provide backup steam to the steam loop. The facility produces and sells wholesale electricity, steam, and chilled water and is subject to the Acid Rain requirements.

The duct burner cannot physically operate unless the gas turbine is operating. The package boilers are used to produce steam when the gas turbine is not operating.

The gas turbine is subject to 40 CFR Part 60 Subpart GG, while the duct burner and the Zurn package boiler are both subject to 40 CFR Part 60 Subpart D<sub>b</sub>. The Cleaver Brooks package boiler is subject to 40 CFR Part 60 Subpart D<sub>c</sub>. The requirements of 40 CFR Part 60 Subpart A have been subsumed into the requirements of 40 CFR Part 60 Subparts D<sub>b</sub>, D<sub>c</sub>, and GG. The Detroit diesel starter engine and diesel powered boiler feed water pump engine are existing affected sources subject to 40 CFR Part 63 Subpart ZZZZ. The Detroit diesel starter engine and diesel powered boiler feed water pump engine meet the definition of a black start engine and an emergency stationary RICE in accordance with 40 CFR §63.6675, respectively. The Auxiliary boilers are not subject to 40 CFR 63, Subpart JJJJJJ as long as they meet the definition of a gas-fired boiler in accordance with 40 CFR §63.11237. CDECCA is not a major source of HAPs.

The steam turbine, the adsorption chillers, and the centrifugal chillers do not emit any regulated pollutants. The centrifugal chillers, although they are electric driven, are considered emission units. This is because the centrifugal chillers use freon 114 (1,2 dichlorotetrafluoroethane, CAS No. 76-14-2) as a refrigerant and are therefore subject to 40 CFR 82, Protection of Stratospheric Ozone. Applicable requirements for the chillers are provided in 40 CFR 82 Subpart F, Recycling and Emissions Reduction

The Safety-Kleen Model 30 parts cleaner is subject to RCSA §22a-174-20(1). Applicable requirements for the cleaner are provided in RCSA §22a-174-20(1)(3) for cold cleaning units.

EU 1& 2 are a CAIR NO<sub>x</sub> Ozone season unit and are therefore subject to RCSA §22a-174-22c and 40 CFR Part 96. The applicable requirements of these regulations have been incorporated into this Title V permit.

## Section II: Emissions Units Information

### A. EMISSIONS UNITS DESCRIPTION

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

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION</b>					
<b>Emissions Units</b>	<b>Emissions Unit Description</b>	<b>Size Rating/ Design Capacity</b>	<b>Control Unit Description</b>	<b>Monitoring Unit Description</b>	<b>Permit, Order, Registration No.; Regulations; or Standard</b>
EU 1	General Electric Gas Turbine, Model PG 6531(Frame 6)	<ol style="list-style-type: none"> <li>1. 520.8 MMBtu/hr (for oil)</li> <li>2. 548.2 MMBtu/hr (for natural gas)</li> </ol>	Steam Injection to Control NO <sub>x</sub>	<ol style="list-style-type: none"> <li>1. NO<sub>x</sub> analyzer meeting the requirements of 40 CFR Part 60 Subpart GG and/or 40 CFR Part 75, Appendix D</li> <li>2. SO<sub>2</sub> analyzer or an SO<sub>2</sub> monitoring system meeting the requirements of 40 CFR Part 75, Appendix D</li> <li>3. CO<sub>2</sub> analyzer meeting the requirements of 40 CFR Part 60 Subpart D<sub>b</sub></li> <li>4. Opacity Monitor meeting the requirements of 40 CFR Part 60 Subpart D<sub>b</sub></li> </ol>	<ol style="list-style-type: none"> <li>1. P 075-0064</li> <li>2. 40 CFR Part 60 Subpart GG</li> <li>3. 40 CFR Parts 72 through 78</li> <li>4. Order 8320</li> <li>5. 40 CFR Part 96</li> <li>6. RCSA §22a-174-22c</li> <li>7. P 075-001-TIV (Acid Rain permit)</li> </ol>
EU 2	John Zinc Duct Burner, S/N DB-553840	<ol style="list-style-type: none"> <li>1. 187.4 MMBtu/hr (for oil)</li> <li>2. 190.6 MMBtu/hr (for natural gas)</li> </ol>	Low NO <sub>x</sub> Burner	<ol style="list-style-type: none"> <li>1. NO<sub>x</sub> analyzer meeting the requirements of 40 CFR Part 60 Subpart GG and/or 40 CFR Part 75, Appendix D</li> <li>2. SO<sub>2</sub> analyzer or an SO<sub>2</sub> monitoring system meeting the requirements of 40 CFR Part 75, Appendix D</li> <li>3. CO<sub>2</sub> analyzer meeting the requirements of 40 CFR Part 60 Subpart D<sub>b</sub></li> <li>4. Opacity Monitor meeting the requirements of 40 CFR Part 60 Subpart D<sub>b</sub></li> </ol>	<ol style="list-style-type: none"> <li>1. P 075-0064</li> <li>2. 40 CFR Part 60 Subpart D<sub>b</sub></li> <li>3. 40 CFR Parts 72 through 78</li> </ol>

## Section II: Emissions Units Information

TABLE IIA: EMISSIONS UNITS DESCRIPTION, Continued						
Emissions Units	Emissions Unit Description	Size Rating/ Design Capacity	Control Unit Description	Monitoring Unit Description	Permit, Order, Registration No.; Regulations; or Standard	
EU 3	Zurn Package Boiler S/N 101087	<ol style="list-style-type: none"> <li>1. 187.4 MMBtu/hr (for oil)</li> <li>2. 194.8 MMBtu/hr (for natural gas)</li> </ol>	Low NO <sub>x</sub> Burner and Efficient Combustion Controls	<ol style="list-style-type: none"> <li>1. NO<sub>x</sub> analyzer meeting the requirements of 40 CFR Part 60 Subpart D<sub>b</sub></li> <li>2. SO<sub>2</sub> analyzer, in lieu of a CEMS for SO<sub>2</sub>. The Permittee shall obtain fuel receipts as described in 40 CFR §60.49b(r) and certify that only very low sulfur oil, as defined in 40 CFR §60.41b, was combusted during each reporting period.</li> <li>3. CO<sub>2</sub> analyzer meeting the requirements of 40 CFR Part 60 Subpart D<sub>b</sub></li> <li>4. Opacity Monitor meeting the requirements of 40 CFR Part 60 Subpart D<sub>b</sub></li> </ol>	<ol style="list-style-type: none"> <li>1. P 075-0065</li> <li>2. 40 CFR Part 60 Subpart D<sub>b</sub>; 40 CFR §60.47b(a) &amp; (f)</li> </ol>	
EU 4	Detroit Diesel Starter Engine Model # 12V-71-IT, Engine # 7123-7300	5.81 MMBtu/hr	None	None	<ol style="list-style-type: none"> <li>1. P 075-0150</li> <li>2. 40 CFR Part 60 Subpart ZZZZ.</li> </ol>	
EU 10	Diesel Powered Boiler Feed Water Pump Engine	0.16 MMBtu/hr	None	None	40 CFR Part 60 Subpart ZZZZ	
EU 12	Safety Kleen Model #30 Metal Parts Cleaner	17 gallon solvent fill	None	None	None	
GEU 2	EU 15	Centrifugal Chiller	1800 ton of cooling capacity (5,000 lb Freon 114)	None	None	40 CFR Part 82
	EU 16	Centrifugal Chiller	1800 ton of cooling capacity (5,000 lb Freon 114)	None	None	40 CFR Part 82

**Section II: Emissions Units Information**

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION, Continued</b>					
<b>Emissions Units</b>	<b>Emissions Unit Description</b>	<b>Size Rating/ Design Capacity</b>	<b>Control Unit Description</b>	<b>Monitoring Unit Description</b>	<b>Permit, Order, Registration No.; Regulations; or Standard</b>
EU 17	Dual-fuel, Cleaver-Brooks Package Boiler	32.659 MMBtu/hr (for natural gas) 25 MMBtu/hr (for No. 2 fuel oil)	Low NOx Burners	None	1. RCSA§22a-174- 3b(c) 2. 40 CFR Part 60 Subpart Dc 3. RCSA §22a-174-22
<i>All applicable requirements for the following units are listed in the premises-wide general requirements portion of this Title V Permit:</i>					
<b>Emissions Units</b>		<b>Emissions Unit Description</b>			<b>Size Rating/ Design Capacity</b>
GEU 1	EU 5	No. 2 Fuel Oil Underground Storage Tank			60,900 gals
	EU 6	No. 2 Fuel Oil Underground Storage Tank			60,900 gals
	EU 7	No. 2 Fuel Oil Underground Storage Tank			60,900 gals
	EU 8	No. 2 Fuel Oil Underground Storage Tank			60,900 gals
EU 11		BAC-Pritchard Model #7454-858-4 Cooling Tower			36,000 gpm max. circulation
EU 13		Two Stage LiBr Absorption Chiller			900 tons cooling capacity
EU 14		Two Stage LiBr Absorption Chiller			900 tons cooling capacity

## Section II: Emissions Units Information

### B. OPERATING SCENARIO IDENTIFICATION

The Permittee shall be allowed to operate under the following scenarios without notifying the commissioner, provided that such operations are explicitly provided for and described in the table below. The Permittee shall record contemporaneously with the operation of emissions units, the operating scenario under which each emissions unit is operating in a log to be kept at the subject premises.

<b>TABLE II.B: EMISSIONS UNIT IDENTIFICATION-SOS, AND AOS</b>		
Identification of Operating Scenarios	Emissions Unit(s) Associated with the Scenarios	Description of Scenarios
SOS	EU 1 & EU 2	Both units firing natural gas. EU 2 shall only operate when EU 1 is operating.
SOS	EU 4	EU 4 is the starter engine for EU 1. It operates during startup and shutdown of EU 1, during washing of the turbine blades, and for engine testing and maintenance. EU 4 operates on diesel oil.
SOS	EU 12	Solvent used is petroleum naphtha.
SOS	GEU 2	Units using Freon 114.
SOS	EU 17	Unit firing natural gas. EU 17 shall only operate when EU 1, EU 2, & EU 3 are not operating except during transitional and testing periods.
AOS-1	EU 1, 2, 4, 12, & GEU 2	EU 1 & 2 firing No. 2 fuel oil, $\leq 0.3\%$ sulfur by weight. EU 2 shall only operate when EU 1 is operating. The other units as stated in SOS.
AOS-2	EU 1, 2, 4, 12, & GEU 2	Interchangeable operation of EU 1 & EU 2 on different fuels (No. 2 fuel oil and natural gas). EU 2 shall only operate when EU 1 is operating. The other units as stated in SOS.
AOS-3	EU 1, 4, 12, & GEU 2	EU 1 firing natural gas. The other units as stated in SOS.
AOS-4	EU 1, 4, 12, & GEU 2	EU 1 firing No. 2 fuel oil $\leq 0.3\%$ sulfur by weight. The other units as stated in SOS.
AOS-5	EU 3, 12, & GEU 2	EU 3 firing natural gas. EU 3 shall only operate when EU 2 is not operating (i.e. EU 1 & EU 3 may operate simultaneously, typically during startup or shutdown of EU 1 or while performing emissions testing or RATA on EU 3, as long as EU 2 is not also operating). The other units as stated in SOS.
AOS-6	EU 3, 12, & GEU 2	EU 3 firing No. 2 fuel oil $\leq 0.3\%$ sulfur by weight. EU 3 shall only operate when EU 2 is not operating (i.e. EU 1 and EU 3 may operate simultaneously, typically during startup or shutdown of EU 1 or while performing emissions testing or RATA on EU 3, as long as EU 2 is not also operating). The other units as stated in SOS.
AOS-7	EU 17, 12, & GEU 2	EU 17 firing natural gas. EU 17 shall only operate when EU 2 is not operating (i.e. EU 1 & EU 17 may operate simultaneously, typically during startup or shutdown of EU 1 or while performing emissions testing on EU 17, as long as EU 2 is not also operating). The other units as stated in SOS.
AOS-8	EU 17, 12, & GEU 2	EU 17 firing No. 2 fuel oil $\leq 0.3\%$ sulfur by weight. EU 17 shall only operate when EU 2 is not operating (i.e. EU 1 and EU 17 may operate simultaneously, typically during startup or shutdown of EU 1 or while performing emissions testing on EU 17, as long as EU 2 is not also operating). The other units as stated in SOS.

### Section III: Applicable Requirements and Compliance Demonstration

The following contains terms and conditions for the operation and compliance demonstrations of each identified Emissions Unit regulated by this Title V Permit.

#### A. EMISSIONS UNITS 1 & 2 (EU 1 & 2) - GENERAL ELECTRIC GAS TURBINE AND JOHN ZINC DUCT BURNER

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

###### a. Limitation or Restriction

- i. The NO<sub>x</sub> emissions when firing natural gas in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 42 ppmvd @ 15% O<sub>2</sub> (0.149 lb/MMBtu) except during periods of startup or shutdown. In addition, the NO<sub>x</sub> target level when firing natural gas shall be 30 ppmvd @ 15% O<sub>2</sub>. [P 075-0064]
- ii. The NO<sub>x</sub> emissions when firing natural gas in the turbine (EU 1), shall not exceed 81.5 lb/hr. [P 075-0064]
- iii. The NO<sub>x</sub> emissions when firing natural gas in the turbine and duct burner (EU 1 & 2) shall not exceed 107.4 lb/hr. [P 075-0064]
- iv. The NO<sub>x</sub> emissions when firing No. 2 fuel oil in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 62 ppmvd @ 15% O<sub>2</sub> (0.24 lb/MMBtu) except during periods of startup or shutdown. In addition, the NO<sub>x</sub> target level when firing No. 2 fuel oil shall be 60 ppmvd @ 15% O<sub>2</sub>. [P 075-0064]
- v. The NO<sub>x</sub> emissions when firing No. 2 fuel oil in the turbine (EU 1), shall not exceed 124.9 lb/hr. [P 075-0064]
- vi. The NO<sub>x</sub> emissions when firing No. 2 fuel oil in the turbine and duct burner (EU 1 & 2), shall not exceed 151.5 lb/hr. [P 075-0064]
- vii. The NO<sub>x</sub> emissions when firing natural gas in the turbine (EU 1) and No. 2 fuel oil in the duct burner (EU 2) shall not exceed 107.4 lb/hr. [P 075-0064]
- viii. The NO<sub>x</sub> emissions when firing No. 2 fuel oil in the turbine (EU 1) and natural gas in the duct burner (EU 2) shall not exceed 150.8 lb/hr. [P 075-0064]
- ix. The total NO<sub>x</sub> emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 700 tpy. [P 075-0064]
- x. For startup and shutdown periods, not to exceed 180 minutes each, the applicable NO<sub>x</sub> emissions limit shall be 570 lbs/event when firing either natural gas or No. 2 fuel oil. [P 075-0064]
- xi. The non-ozone seasonal average actual NO<sub>x</sub> emission rate for the turbine (EU 1) shall not exceed 0.15 lbs/MMBtu. [Order 8298]

### Section III: Applicable Requirements and Compliance Demonstration

#### b. Monitoring and Testing Requirements

- i. The Permittee shall install, calibrate, maintain, operate, and certify a continuous emission monitoring system (CEMS) and recording systems for NO<sub>x</sub>. [P 075-0064]
- ii. The CEMS shall be installed, calibrated, operated and tested in accordance with RCSA §22a-174-4(c), RCSA §22a-174-22c (for NO<sub>x</sub>), and with the requirements specified in 40 CFR Part 60 Subpart A, Appendix B and Appendix F, as may be amended from time to time. In lieu of the requirements specified in 40 CFR Part 60, Appendices B and F, the NO<sub>x</sub> CEMS shall be operated and maintained with the requirements of 40 CFR 75, Appendices A and B. [P 075-0064]
- iii. The performance or quality assurance testing of the CEMS shall be conducted in accordance with a testing protocol approved by the commissioner. [RCSA §22a-174-22(k)(3)]
- iv. The Permittee shall use data recorded by the CEMS and any other records and reports to determine compliance with NO<sub>x</sub> emissions. The CEMS shall be capable of calculating emission concentrations corrected to 15% O<sub>2</sub> at ISO standard conditions. [P 075-0064; RCSA §22a-174-22(l)(7)]
- v. The averaging times for all periods of operation for the emission limitations with the use of the CEMS shall be 1-hr block average. NO<sub>x</sub> emission limits for startup and shutdown periods will be evaluated based on the total mass emissions during the event. Startup, shutdown or malfunction periods shall not exceed 180 minutes. The hourly averages shall contain valid data points for at least 75% of the hour. [P 075-0064; RCSA §22a-174-22(k)(4)]
- vi. The Permittee shall utilize CEMS for NO<sub>x</sub> in accordance with 40 CFR §60.334(b) as an alternative to respectively, monitoring of the water-to-fuel ratio required under 40 CFR §60.334(a) to estimate NO<sub>x</sub> emissions, and monitoring of the nitrogen content of the fuel under 40 CFR §60.334(b). [40 CFR §60.334(b)]
- vii. The NO<sub>x</sub> emissions shall be controlled with steam injection. The steam/fuel ratio shall not exceed 1.51/1. The maximum allowable rate of steam injection shall be 36,000 lb/hr. [P 075-0064]
- viii. Annual NO<sub>x</sub> emissions shall be verified by the Permittee by, adding the current month's NO<sub>x</sub> emissions to the previous 11 months' emissions. [P 075-0064]
- ix. If the NO<sub>x</sub> emission target limits (30 ppmvd @ 15% O<sub>2</sub> for natural gas firing and 60 ppmvd @ 15% O<sub>2</sub> for No. 2 fuel oil firing) are exceeded by 6 ppmvd @ 15% O<sub>2</sub> based upon CEMS data (24 consecutive 1-hr block averages), the Permittee shall immediately make operational changes designed to bring NO<sub>x</sub> emissions in line with the given limitations. [P 075-0064]
- x. The turbine (EU 1) shall be shut down when measured NO<sub>x</sub> emissions levels acceptable to the commissioner or CEMS NO<sub>x</sub> data based on 24 consecutive 1-hr block averages exceeds 42 ppmvd @ 15% O<sub>2</sub> when firing natural gas or 62 ppmvd @ 15% O<sub>2</sub> when firing No. 2 fuel oil. [P 075-0064]

### **Section III: Applicable Requirements and Compliance Demonstration**

- xi. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR §60.7(b)]
- xii. The Permittee shall comply with RCSA §22a-174-22 in accordance with the submitted and approved compliance plan to the Department. [RCSA §22a-174-22(m)]
- xiii. If required by the commissioner, the Permittee shall measure NO<sub>x</sub> emissions using EPA Method 7E stack test. [RCSA §22a-174-5(e)(2)]
- xiv. Not more than one year from April 21, 2010, the Permittee shall perform maintenance and inspection of the turbine (EU 1). Such maintenance and inspection shall include, but not be limited to, the following: [Order 8298]
  - A. Inspect the combustion system, and clean or replace any components of the combustion system as necessary, in accordance with manufacturer's specification or current good engineering practice;
  - B. Inspect the system controlling the air-to-fuel ratio, and ensure that it is calibrated and functioning in accordance with the manufacturer's specifications or current good engineering practice;
  - C. Measure the operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity; and
  - D. Make and keep records including, but not limited to, the following:
    - 1. Demonstration that any maintenance, tune-up, and/or inspection activity performed on the turbine (EU 1) in accordance with Section III.A.1.b.xiv of this Title V permit has been performed in accordance with the manufacturer's specifications or current good engineering practice,
    - 2. The date and a description of any maintenance, tune-up, and/or inspection activity performed on the turbine (EU 1) in accordance with Section III.A.1.b.xiv of this Title V permit,
    - 3. The name, title and affiliation of the person conducting any maintenance, tune-up, and/or inspection activity performed on the turbine (EU 1) in accordance with Section III.A.1.b.xiv of this Title V permit,
    - 4. The operating parameters of the turbine (EU 1) used to determine that the turbine (EU 1) is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity performed in accordance with Section III.A.1.b.xiv of this Title V permit.

### Section III: Applicable Requirements and Compliance Demonstration

#### c. Record Keeping Requirements

- i. The Permittee shall maintain records of the following information for each steam generating unit operating day: [40 CFR §60.49b(g)]
  - A. Calendar date.
  - B. The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/million Btu heat input) measured or predicted.
  - C. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
  - D. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards, with the reasons for such excess emissions as well as a description of corrective actions taken.
  - E. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
  - F. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
  - G. Identification the times when the pollutant concentration exceeded full span of the continuous monitoring system.
  - H. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with the requirements in Section III.A.1.b & C above.
  - I. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.
- ii. The Permittee shall keep monthly and annual records of all fuel used, continuous emissions monitoring (if applicable), and operating hours. [RCSA §22a-174-22(1)(1)(C)]
- iii. The Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for No. 2 fuel oil and natural gas combusted in the duct burner during the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR §60.49b(d)]
- iv. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance done on the turbine and the duct burner (EU 1 & 2, respectively). [RCSA §22a-174-22(1)(1)(D)]

### **Section III: Applicable Requirements and Compliance Demonstration**

- v. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(E)]
- vi. The Permittee shall keep all charts, electronically stored data, and printed records produced by the NOx continuous emissions monitor. [RCSA §22a-174-22(1)(1)(F)]
- vii. The Permittee shall keep procedures for calculating NOx emission rates. [RCSA §22a-174-22(1)(1)(G)]
- viii. The Permittee shall keep records of all performance evaluations, calibration checks and adjustments on CEMS; a record of maintenance procedures; and all data necessary to complete the quarterly reports required by the Department. [RCSA §22a-174-22(1)(1)(I)]
- ix. The Permittee shall maintain records of opacity. [40 CFR §60.49b(f)]
- x. The Permittee shall maintain reports of all monitoring and test data in accordance with RCSA §22a-174-4(d). [RCSA §22a-174-4(d)]
- xi. The Permittee shall keep records on the premises indicating continual compliance with all permit conditions at all times and shall make them available upon request by the commissioner for the duration of this Title V permit, or for the previous five years, whichever is less. [RCSA §22a-174-4(d); RCSA §22a-174-33(o)(2)]
- xii. Not more than 30 days after the completion of each Non-Ozone Season, the Permittee shall record the Non-Ozone Season average NOx emission rate for the turbine (EU 1), the quantity of DERCs and/or allowances possessed on the first day of the Non-Ozone Season, and the quantity of DERCs deducted and/or Allowances transferred in accordance with Sections III.A.1.e.x and xi of this Title V permit. [Order 8298]
- xiii. On each day, during the Ozone Season, that the Permittee operates in accordance with Section III.A.1.e.viii of this Title V permit, the Permittee shall make and keep records of all emissions unit operations in accordance with Section III.A.1.e.viii of this Title V permit, including copies of all written correspondence demonstrating that operations are due to one or more of the factors described in Section III.A.1.e.viii of this Title V permit. [Order 8320]
- xiv. The Permittee shall retain records and supporting documentation required by Order 8320 for a minimum of five years, commencing on the date such records were created. The Permittee shall provide the records specified above to the commissioner within 30 days of receipt of a written request from the commissioner. All records shall be maintained in accordance with RCSA §§ 22a-174-4 and 22a-174-22. [Order 8320]

#### **d. Reporting Requirements**

- i. The Permittee shall, on a daily basis review data recorded and calculated for that day and report to the commissioner, within three working days, any exceedances of an emission limit. [P 075-0064]

### Section III: Applicable Requirements and Compliance Demonstration

- ii. The Permittee shall submit to the commissioner and the Administrator a notification of any physical or operational change to the turbine (EU 1) and/or the duct burner (EU 2) which may increase the emission rate of NO<sub>x</sub> unless that change is specifically exempted under an applicable subpart or in 40 CFR §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The commissioner and the Administrator may request additional relevant information subsequent to this notice. [P 075-0064; 40 CFR §60.7(a)(4)]
- iii. The Permittee shall submit reports of excess emissions and monitoring downtime, in accordance with 40 CFR §60.7(c) and 60.334(j)(1)(iii). [40 CFR §60.7(c); 60.334(j)(1)(iii)]
- iv. If there are no excess emissions during the calendar quarter, the Permittee shall submit to the commissioner and the Administrator, a report semiannually stating that no excess emissions occurred during the semiannual reporting period. [40 CFR §60.49b(h)]
- v. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting any performance or quality assurance testing the NO<sub>x</sub> CEMS. [RCSA §22a-174-22(k)(3)]
- vi. Within 60 days of the completion of certification tests conducted on the CEMS, the Permittee shall submit a written report of the results of such testing to the commissioner and the Administrator. [RCSA §22a-174-22(l)(3); 40 CFR §60.49b(b)]
- vii. The Permittee shall provide the records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- viii. Not later than July 30 of each calendar year, the Permittee shall submit a written report containing copies of all records required pursuant to Sections III.A.1.c.xiii and xiv of this Title V permit. The commissioner may prescribe the forms to be used for the submission of these reports. The Permittee shall submit these reports on such forms, if prescribed by the commissioner. [Order 8320]
- ix. The Permittee shall use best efforts to submit to the commissioner all documents required by Order 8320 in a complete and approvable form. If the commissioner notifies Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Permittee shall correct the deficiencies and resubmit it within the time specified by the commissioner or, if no time is specified by the commissioner, within 30 days of the commissioner's notice of deficiencies. In approving any document or other action under Order 8298, the commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the commissioner deems necessary to carry out the purposes of Order 8320. Nothing in this section shall excuse noncompliance or delay. [Order 8320]

### Section III: Applicable Requirements and Compliance Demonstration

#### e. Operating Requirements

- i. Pursuant to RCSA §22a-174-22(j), The Permittee shall comply with RCSA §22a-174-22(e), when operating the turbine (EU 1) by means of emissions trading in accordance with the provisions of the Trading Agreement and Order 8320. [Order 8320]
- ii. The Permittee shall use the actual non-ozone season average emission rate measured by CEMS for the purposes of calculating Actual DERCs/Allowances Required for the turbine (EU 1). [Order 8320]
- iii. The commissioner, in accordance with RCSA §22a-174-22(j) hereby allows the Permittee to comply with RCSA §22a-174-22 at the facility through the use of emissions trading, subject to the provisions of Order 8320. [Order 8320]
- iv. The Permittee shall obtain and use sufficient DERCs and/or Allowances in such a manner as to comply with Sections III.A.1.e.ix and x of this Title V permit. All Allowances used shall come from an emissions unit that is within the same ozone nonattainment area as the Permittee. Any Allowances used to comply with Order 8320 shall be allocated for the control period that occurs during the same year those allowances are used for compliance with Order 8320. [Order 8320]
- v. Prior to using Allowances in accordance with Section III.A.1.e.viii of this Title V permit the Permittee shall obtain a General Account or Compliance Account in the CAIR NATS. [Order 8320]
- vi. For the purposes of compliance with RCSA §22a-174-22 and the provisions of Order 8320, DERCs shall only remain valid for five calendar years from the year of the generation of such DERCs. DERCs older than five calendar years from their creation are not valid for use for compliance with RCSA §22a-174-22 and the provisions of Order 8320. [Order 8320]
- vii. Ozone Season Fuel Use Restriction: Notwithstanding the requirements of Section III.A.1.e.iv of this Title V permit, when operating the turbine (EU 1) during the Ozone Season, the Permittee shall operate the turbine (EU 1) while firing or co-firing the lowest NO<sub>x</sub> emitting fuel type or combination of fuel types that are legally authorized to be burn in accordance with Departmental statutes, regulations, permits and/or registration. [Order 8320]
- viii. Notwithstanding Section III.A.1.e.vii of this Title V permit, during the Ozone Season, the Permittee may operate the turbine (EU 1) on fuels that result in higher emissions of NO<sub>x</sub>, if either: [Order 8320]
  - A. the availability of fuel oil that complies with Section III.A.1.e.vii of this Title V permit is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency;
  - B. the supply of gaseous fuels to the turbine (EU 1) is interrupted due to inadequate supply or in accordance with an interruptible supply agreement between the Permittee and the gaseous fuel supplier;

### Section III: Applicable Requirements and Compliance Demonstration

- C. the purchase of the lowest NOx emitting fuel type will prevent the turbine (EU 1) from responding to an ISO-New England dispatch directive on a timely basis under an emergency power shortage event in Connecticut or the ISO-NE region.
- D. the unit is operating in order to conduct testing required by any governmental agency of auditing /testing required to demonstrate the ability to satisfy commitments made to ISO-NE in the Forward Capacity and/or Locational Forward Reserve Markets.

ix. Non-Ozone Season DERC/Allowance Use. The Permittee shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Non- Ozone Season Actual DERCs/Allowances required for that Non-Ozone Season. Compliance with this Section of this Title V permit shall be determined as follows: [Order 8320]

- A. Before the first day of each Non-Ozone Season, the Permittee shall estimate DERCs and/or Allowances required for that Non- Ozone Season for the turbine (EU 1) based on the average actual NOx emission rate from the emission unit and an emission limit of 0.15 lb/MMBtu as follows:

Estimated Non-Ozone Season DERCs/Allowances Required =

$\{(Estimated\ Non-Ozone\ Season\ fuel\ use\ in\ MMBtu) \times ((estimated\ average\ NOx\ Emission\ Rate\ lb/MMBtu) - (0.95 \times 0.15\ lb/MMBtu))\} \div 2000\ lbs/ton$

- B. No later than 30 days after the end of each Non-Ozone Season, the Permittee shall calculate Actual Non-Ozone Season DERCs and/or Allowances used during that Non-Ozone Season for each emission unit as follows:

Actual Non-Ozone Season DERCs/Allowances Required =

$\{(Actual\ Non-Ozone\ Season\ fuel\ use\ in\ MMBtu) \times ((Non-Ozone\ Season\ Average\ Actual\ NOx\ Emission\ Rate\ lb/MMBtu) - (0.95 \times 0.15\ lb/MMBtu))\} \div 2000\ lbs/ton$

x. Not more than 30 days after the completion of the Non-Ozone Season, the Permittee shall deduct a quantity of DERCs from the current balance of DERCs possessed by the Permittee and/or transfer a quantity of Allowances from the Permittee's NOx General Account or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. [Order 8320]

xi. Doubling: If the Actual DERCs/Allowances Required for any Non-Ozone Season, determined in accordance with Section III.A.1.e.ix of this Title V permit, exceeds the quantity of DERCs and/or Allowances in the Permittee's possession on the first day of that Non-Ozone Season, then in addition to the deduction or transfer specified in Section III.A.1.e.x of this Title V permit, the Permittee shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Permittee and/or transfer a quantity of Allowances from the Permittee's NOx General Account or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Such additional DERC deduction or Allowance transfer shall be performed at the same

## Section III: Applicable Requirements and Compliance Demonstration

time as any DERC deduction or Allowance transfer specified in Section III.A.1.e.x of this Title V permit. [Order 8320]

- xii. Notwithstanding the provisions of Section III.A.1.e.xi of this Title V permit, any violation of Section III.A.1.e.ix of this Title V permit may be subject to additional enforcement action as may be deemed appropriate by the commissioner in accordance with the Department's enforcement response policy. [Order 8320]
- xiii. Not more than 30 days after the completion of each Non-Ozone Season, the Permittee shall demonstrate that any Allowances used for compliance with Order 8320 during the each non-ozone season are surplus, quantifiable, enforceable and permanent. This shall be determined by demonstrating that the actual NOx emissions during the ozone season, as reported to the United States Environmental Protection Agency, from the emission unit to which the Allowances were originally allocated were equal to or less than the amount of Allowances allocated to such unit by the State of Connecticut minus the Allowances used for compliance with Order 8320. Notwithstanding the control period limitations of Section III.A.1.e.iv of this Title V permit, Allowances used to comply with this Section of the Title V permit for a Non-Ozone Season must have been originally allocated for the control periods that correspond to the same calendar years within that Non-Ozone Season. [Order 8320]

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

#### a. Limitation or Restriction

- i. The SO<sub>x</sub> emissions when firing natural gas in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2) shall not exceed 0.0006 lb/MMBtu. [P 075-0064]
- ii. The SO<sub>x</sub> emissions when firing natural gas in turbine (EU 1) shall not exceed 0.33 lb/hr. [P 075-0064]
- iii. The SO<sub>x</sub> emissions when firing natural gas in the turbine and duct burner (EU 1 & 2), shall not exceed 0.45 lb/hr. [P 075-0064]
- iv. The SO<sub>x</sub> emissions when firing No. 2 fuel oil in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 60 ppmvd @ 15% O<sub>2</sub> (0.306 lb/MMBtu). [P 075-0064]
- v. The SO<sub>x</sub> emissions when firing No. 2 fuel oil in the turbine (EU 1), shall not exceed 159.6 lb/hr. [P 075-0064]
- vi. The SO<sub>x</sub> emissions when firing No. 2 fuel oil in turbine and duct burner (EU 1 & 2), shall not exceed 217.0 lb/hr. [P 075-0064]
- vii. The total SO<sub>x</sub> emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 1099.3 tpy. [P 075-0064]
- viii. For startup and shutdown periods, the applicable emissions limit for SO<sub>2</sub> shall be determined on an lb/hr basis. [P 075-0064]

### **Section III: Applicable Requirements and Compliance Demonstration**

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

- i. The Permittee shall monitor the sulfur content of the fuel in accordance with 40 CFR §60.334(h)(1), (3), (4). [40 CFR §60.334(h); P 075-0064]
- ii. The turbine (EU 1) shall not exceed the SO<sub>2</sub> emission limitation of 0.015 percent by volume at 15% O<sub>2</sub> specified in 40 CFR §60.333. [RCSA 22a-174-4(c)(5)]
- iii. If an SO<sub>2</sub> CEMS is used, at the Permittee's option, the monitor data availability shall be no less than 90% on a quarterly basis, in accordance with the Department specifications. Periods of unavailability, which are the results of daily calibrations and other QA activities, shall be included as downtime. [P 075-0064]
- iv. The frequency of determining the sulfur content of the fuel shall be in accordance with 40 CFR §60.334(i) or §60.334(h)(3) or (4) as applicable.. [40 CFR §60.334]
- v. The Permittee shall comply with the sulfur dioxide emission limits for the in-line duct burner at all times, including periods of startup, shutdown, and malfunction. Compliance with this requirements shall be demonstrated by demonstrating that the No. 2 fuel oil meets the definition of very low sulfur oil by the methods in 40 CFR §60.42b(j). [P 075-0064; 40 CFR §60.42b(g)&(j)]
- vi. Annual SO<sub>x</sub> emissions shall be verified by the Permittee, by adding the current month's SO<sub>x</sub> emissions to the previous 11 months' emissions. [P 075-0064]
- vii. The unit shall be shut down by the Permittee, when 24 consecutive 1-hour block averages exceed the permit limit. [P 075-0064; RCSA §22a-174-33(j)(1)(K)(ii)]
- viii. If required by the commissioner, the Permittee shall measure SO<sub>x</sub> emissions using EPA Method 6 or 6C stack test. [RCSA §22a-174-5(e)(2)]

#### **c. Record Keeping Requirements**

- i. The Permittee shall obtain and maintain at the premises, fuel receipts from the fuel supplier which certify that the oil combusted in the duct burner meets the definition of distillate oil as defined in 40 CFR §60.41b. [P 075-0064; 40 CFR §60.49b(r)]
- ii. Each fuel oil shipment for this equipment shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. [P 075-0064]
- iii. The Permittee shall record and maintain records of the amounts of each fuel combusted in the duct burner during each day and calculate the annual capacity factor individually for No. 2 fuel oil and natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [P 075-0064; 40 CFR §60.49b(d)]
- iv. The Permittee shall keep records on the premise indicating continual compliance with all permit conditions at all times. Such data shall be maintained at the site for a minimum of five years, commencing from the date such records were created and made available upon request by the commissioner. [P 075-0064; RCSA §22a-174-33(o)(2)]

### **Section III: Applicable Requirements and Compliance Demonstration**

#### **d. Reporting Requirements**

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner and Administrator within three working days any exceedances of an emission limit. [40 CFR §60.49b(h)]
- ii. The Permittee shall submit to the commissioner and the Administrator a notification of any physical or operational change to the turbine (EU 1) and/or the duct burner (EU 2) which may increase the emission rate of SO<sub>x</sub>, unless that change is specifically exempted under an applicable subpart or in 40 CFR §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The commissioner and the Administrator may request additional relevant information subsequent to this notice. [40 CFR §60.7(a)(4)]
- iii. Continuous monitored parameters or emissions shall be subject to excess emissions reporting, in accordance with 40 CFR §60.334(j)(2). [40 CFR §60.334(j)(2)]
- iv. If there are no excess emissions during the calendar quarter, the Permittee shall submit to the commissioner and the Administrator, a report semiannually stating that no excess emissions occurred during the semiannual reporting period. [40 CFR §60.49b(h)]
- v. Reports shall be submitted to the commissioner certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period. [40 CFR §60.49b(r)]
- vi. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### **3. TSP**

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

- i. The TSP emissions when firing natural gas in the turbine (EU 1) or in turbine and duct burner (EU 1 & 2) shall not exceed 0.0136 lb/MMBtu. [P 075-0064]
- ii. The TSP emissions when firing natural gas in the turbine (EU 1), shall not exceed 7.45 lb/hr. [P 075-0064]
- iii. The TSP emissions when firing natural gas in the turbine and duct burner (EU 1 & 2) shall not exceed 9.97 lb/hr or 0.0136 lb/MMBtu. [P 075-0064]
- iv. The TSP emissions when firing No. 2 fuel oil in turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 0.035 lb/MMBtu. [P 075-0064]
- v. The TSP emissions when firing No. 2 fuel oil in turbine (EU 1), shall not exceed 18.47 lb/hr. [P 075-0064]

### **Section III: Applicable Requirements and Compliance Demonstration**

- vi. The TSP emissions when firing No. 2 fuel oil in the turbine and duct burner (EU 1 & 2), shall not exceed 21.10 lb/hr. [P 075-0064]
- vii. The total TSP emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 92.3 tpy. [P 075-0064]

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

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual TSP emissions shall be verified by the Permittee, by adding the current month's TSP emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The particulate matter standard shall apply at all times, except during periods of startup, shutdown or malfunction. [P 075-0064; 40 CFR §60.43b(f)]
- iv. If required by the commissioner, the Permittee shall measure TSP emissions using EPA Method 5 stack test. [RCSA §22a-174-5(e)(2)]

#### **c. Record Keeping Requirements**

The Permittee shall maintain records of monthly and annual actual TSP emissions. The monthly TSP emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual TSP emissions shall be calculated each calendar month by adding the current calendar month's TSP emissions to those of the previous 11 months. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### **d. Reporting Requirements**

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [P 075-0064]
- ii. The Permittee shall submit to the commissioner and the Administrator a notification of any physical or operational change to the turbine (EU 1) and/or the duct burner (EU 2) which may increase the emission rate of particulate, unless that change is specifically exempted under an applicable subpart or in 40 CFR §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The commissioner and the Administrator may request additional relevant information subsequent to this notice. [P 075-0064; 40 CFR §60.7(a)(4)]
- iii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### Section III: Applicable Requirements and Compliance Demonstration

#### 4. VOC

##### a. Limitation or Restriction

- i. The VOC emissions when firing natural gas in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2) shall not exceed 0.035 lb/MMBtu. [P 075-0064]
- ii. The VOC emissions when firing natural gas in turbine (EU 1) shall not exceed 19.19 lb/hr. [P 075-0064]
- iii. The VOC emissions when firing natural gas in the turbine and duct burner (EU 1 & 2) shall not exceed 21.70 lb/hr. [P 075-0064]
- iv. The VOC emissions when firing No. 2 fuel oil in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 0.035 lb/MMBtu. [P 075-0064]
- v. The VOC emissions when firing No. 2 fuel oil in turbine (EU 1), shall not exceed 18.20 lb/hr. [P 075-0064]
- vi. The VOC emissions when firing No. 2 fuel oil in the turbine and duct burner (EU 1 & 2), shall not exceed 20.80 lb/hr. [P 075-0064]
- vii. The total VOC emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 93.7 tpy. [P 075-0064]
- viii. For startup and shutdown periods, the applicable emissions limit for VOC shall be determined on a lb/hr basis. [P 075-0064]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual VOC emissions shall be verified by the Permittee, by adding the current month's VOC emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure VOC emissions using EPA Method 25 stack test. [RCSA §22a-174-5(e)(2)]

##### c. Record Keeping Requirements

The Permittee shall maintain records of monthly and annual actual VOC emissions. The monthly VOC emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual VOC emissions shall be calculated each calendar month by adding the current calendar month's VOC emissions to those of the previous 11 months. [P 075-0064]

### Section III: Applicable Requirements and Compliance Demonstration

#### d. Reporting Requirements

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [P 075-0064]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

#### 5. CO

##### a. Limitation or Restriction

- i. The CO emissions when firing natural gas in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2) shall not exceed 0.112 lb/MMBtu. [P 075-0064]
- ii. The CO emissions when firing natural gas in the turbine (EU 1) shall not exceed 61.21 lb/hr. [P 075-0064]
- iii. The CO emissions when firing natural gas in the turbine and duct burner (EU 1 & 2) shall not exceed 73.0 lb/hr or 0.112 lb/MMBtu. [P 075-0064]
- iv. The CO emissions when firing No. 2 fuel oil in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 0.109 lb/MMBtu. [P 075-0064]
- v. The CO emissions when firing No. 2 fuel oil in the turbine (EU 1), shall not exceed 59.60 lb/hr. [P 075-0064]
- vi. The CO emissions when firing No. 2 fuel oil in the turbine and duct burner (EU 1 & 2), shall not exceed 68.80 lb/hr. [P 075-0064]
- vii. The total CO emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 313.7 tpy. [P 075-0064]
- viii. For startup and shutdown periods, the applicable emissions limit for CO shall be determined on a lb/hr basis. [P 075-0064]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual CO emissions shall be verified by the Permittee, by adding the current month's CO emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure CO emissions using EPA Method 10 stack test. [RCSA §22a-174-5(e)(2)]

### **Section III: Applicable Requirements and Compliance Demonstration**

#### **c. Record Keeping Requirements**

The Permittee shall maintain records of monthly and annual actual CO emissions. The monthly CO emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual CO emissions shall be calculated each calendar month by adding the current calendar month's CO emissions to those of the previous 11 months. [P 075-0064]

#### **d. Reporting Requirements**

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [P 075-0064]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### **6. Pb**

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

- i. The Pb emissions when firing No. 2 fuel oil in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 0.000014 lb/MMBtu. [P 075-0064]
- ii. The Pb emissions when firing No. 2 fuel oil in the turbine (EU 1), shall not exceed 0.0051 lb/hr. [P 075-0064]
- iii. The Pb emissions when firing No. 2 fuel oil in the turbine and duct burner (EU 1 & 2), shall not exceed 0.006 lb/hr. [P 075-0064]
- iv. The total Pb emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 0.0263 tpy. [P 075-0064]

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

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual Pb emissions shall be verified by the Permittee, by adding the current month's Pb emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure Pb emissions using EPA Method 12 stack test. [RCSA §22a-174-5(e)(2)]

#### **c. Record Keeping Requirements**

The Permittee shall maintain records of monthly and annual actual Pb emissions. The monthly Pb emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual Pb emissions shall be calculated each calendar month by adding the current calendar month's Pb emissions to those of the previous 11 months. [P 075-0064]

### Section III: Applicable Requirements and Compliance Demonstration

#### d. Reporting Requirements

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [P 075-0064]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

#### 7. H<sub>2</sub>SO<sub>4</sub>

##### a. Limitation or Restriction

- i. The H<sub>2</sub>SO<sub>4</sub> emissions when firing natural gas in the turbine (EU 1) shall not exceed 0.0000081 lb/MMBtu or 0.004 lb/hr. [P 075-0064]
- ii. The H<sub>2</sub>SO<sub>4</sub> emissions when firing natural gas in the turbine and duct burner (EU 1 & 2) shall not exceed 0.0000081 lb/MMBtu or 0.005 lb/hr. [P 075-0064]
- iii. The H<sub>2</sub>SO<sub>4</sub> emissions when firing No. 2 fuel oil in the turbine (EU 1), shall not exceed 1.52 ppmvd @ 15% O<sub>2</sub> (0.0128 lb/MMBtu) or 4.85 lb/hr. [P 075-0064]
- iv. The H<sub>2</sub>SO<sub>4</sub> emissions when firing No. 2 fuel oil in the turbine (EU 1) or in the turbine and duct burner (EU 1 & 2), shall not exceed 3.71 ppmvd @ 15% O<sub>2</sub> (0.0213 lb/MMBtu) or 10.4 lb/hr. [P 075-0064]
- v. The total H<sub>2</sub>SO<sub>4</sub> emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 47.70 tpy. [P 075-0064]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual H<sub>2</sub>SO<sub>4</sub> emissions shall be verified by the Permittee, by adding the current month's H<sub>2</sub>SO<sub>4</sub> emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure H<sub>2</sub>SO<sub>4</sub> emissions using EPA Method 8 stack test. [RCSA §22a-174-5(e)(2)]

##### c. Record Keeping Requirements

The Permittee shall maintain records of monthly and annual actual H<sub>2</sub>SO<sub>4</sub> emissions. The monthly H<sub>2</sub>SO<sub>4</sub> emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual H<sub>2</sub>SO<sub>4</sub> emissions shall be calculated each calendar month by adding the current calendar month's H<sub>2</sub>SO<sub>4</sub> emissions to those of the previous 11 months. [P 075-0064]

### **Section III: Applicable Requirements and Compliance Demonstration**

#### **d. Reporting Requirements**

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [P 075-0064]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

#### **8. Fuel Consumption**

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

- i. The maximum hourly fuel consumption for the turbine (EU 1) when firing natural gas shall be 532,233 cf/hr. [P 075-0064]
- ii. The maximum hourly fuel consumption for the turbine (EU 1) when firing No. 2 fuel oil shall be 3693.6 gal/hr. [P 075-0064]
- iii. The maximum hourly fuel consumption for the duct burner (EU 2) when firing natural gas shall be 185,049 cf/hr. [P 075-0064]
- iv. The maximum hourly fuel consumption for the duct burner (EU 2) when firing No. 2 fuel oil shall be 1329.1 gal/hr. [P 075-0064]

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

The Permittee shall keep records of monthly and annual fuel consumption.  
[RCSA §22a-174-33(j)(1)(K)(ii)]

##### **c. Record Keeping Requirements**

Documentation of fuel firing rate and maximum rated capacity shall be made by the Permittee daily. [P 075-0064]

##### **d. Reporting Requirements**

- i. The Permittee shall review recorded data daily and report to the commissioner within three working days any exceedances of an allowable limit. [P 075-0064]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### Section III: Applicable Requirements and Compliance Demonstration

#### B. EMISSIONS UNIT 3 (EU 3) - ZURN PACKAGE BOILER

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

###### a. Limitation or Restriction

- i. The NO<sub>x</sub> emissions when firing natural gas shall not exceed 37 ppmvd @ 15% O<sub>2</sub> (0.136 lb/MMBtu) or 26.49 lb/hr. [P 075-0065]
- ii. The NO<sub>x</sub> emissions when firing No. 2 fuel oil shall not exceed 37 ppmvd @ 15% O<sub>2</sub> (0.142 lb/MMBtu) or 26.62 lb/hr. [P 075-0065]
- iii. The total NO<sub>x</sub> emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 700 tpy. [P 075-0065]

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

- i. The Permittee shall install, calibrate, maintain, operate, and certify a continuous emissions monitor (CEMS) for NO<sub>x</sub>. [P 075-0065]
- ii. The CEMS shall be installed, calibrated, operated and tested in accordance with RCSA §22a-174-4(c) and with the requirements specified in 40 CFR Part 60 Subpart A, Appendix B and Appendix F, as may be amended from time to time. [P 075-0065]
- iii. The performance or quality assurance testing of the CEMS shall be conducted in accordance with a testing protocol approved by the commissioner. [RCSA §22a-174-22(k)(3)]
- iv. The Permittee shall use data recorded by the CEMS and any other records and reports to determine compliance with NO<sub>x</sub> emissions. [P 075-0065; RCSA §22a-174-22(l)(7)]
- v. The CEMS shall be operated and data recorded during all periods of operation of the package boiler except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR §60.48b(c)]
- vi. The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates under 40 CFR §60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR §60.13(b). At least two data points must be used to calculate each 1-hour average. [40 CFR §60.48b(d)]
- vii. The averaging times for the emission limitations with the use of the CEMS shall be one hour block. This shall include all periods of operation, including startup, shutdown, and malfunction. Startup, shutdown or malfunction periods shall not exceed 180 minutes. [P 075-0065]

### **Section III: Applicable Requirements and Compliance Demonstration**

- viii. The permittee shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the permittee of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Commissioner and/or the Administrator. [40 CFR §60.47b(c)]
- ix. The NO<sub>x</sub> emissions shall be controlled with low NO<sub>x</sub> burners and efficient combustion controls. [P 075-0065]
- x. Annual emissions shall be verified by adding the current month's emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- xi. The Permittee shall comply with RCSA §22a-174-22 in accordance with the submitted and approved compliance plan to the Department. [RCSA §22a-174-22(m)]
- xii. If required by the commissioner, the Permittee shall measure NO<sub>x</sub> emissions using EPA Method 7E stack test. [RCSA §22a-174-5(e)(2)]

#### **c. Record Keeping Requirements**

- i. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance done on the unit. [RCSA §22a-174-22(l)(1)(D)]
- ii. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
- iii. The Permittee shall keep all charts, electronically stored data, and printed records produced by the NO<sub>x</sub> continuous emissions monitor. [RCSA §22a-174-22(l)(1)(F)]
- iv. The Permittee shall keep procedures for calculating NO<sub>x</sub> emission rates. [RCSA §22a-174-22(l)(1)(G)]
- v. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding (for each fuel) the current month's fuel usage to that of the previous 11 months. These calculations shall be made on a monthly basis and made available for inspection by this Bureau upon request. [P 075-0065]
- vi. The Permittee shall keep records of all performance evaluations, calibration checks and adjustments on CEMS; a record of maintenance procedures; and all data necessary to complete the quarterly reports required by the Department. [RCSA §22a-174-22(l)(1)(I)]
- vii. Within 60 days of the completion of certification tests conducted on the CEMS, the Permittee shall submit a written report of the results of such testing to the commissioner and the Administrator. [RCSA §22a-174-22(l)(3); 40 CFR §60.49b(b)]

### Section III: Applicable Requirements and Compliance Demonstration

- viii. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this Title V permit recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records, except as follows specified in 40 CFR §60.7(f). [40 CFR §60.7(f)]
- ix. The Permittee shall maintain reports of all monitoring and test data in accordance with RCSA §22a-174-4(d). [RCSA §22a-174-4(d)]
- x. The Permittee shall keep records on the premises indicating continual compliance with all permit conditions at all times and shall make them available upon request by the commissioner for the duration of this Title V permit, or for the previous five years, whichever is less. [P 075-0065]

#### d. Reporting Requirements

- i. The Permittee shall, on a daily basis, review data recorded and calculated for that day and report to the commissioner, within three working days, any exceedances of an emission limit. [RCSA §22a-174-4(d)(1)]
- ii. If there are no excess emissions during the calendar quarter, the Permittee shall submit to the commissioner and the Administrator, a report semiannually stating that no excess emissions occurred during the semiannual reporting period. [40 CFR §60.49b(h)]
- iii. The Permittee shall notify the commissioner in writing at least 30 days prior to conducting any performance or quality assurance testing on the NO<sub>x</sub> CEMS. [RCSA §22a-174-22(k)(3)]
- iv. Within 60 days of the completion of certification tests conducted on the CEMS, the Permittee shall submit a written report of the results of such testing to the commissioner and the Administrator. [RCSA §22a-174-22(1)(3); 40 CFR §60.49b(b)]
- v. The Permittee shall provide the records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

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

#### a. Limitation or Restriction

- i. The SO<sub>x</sub> emissions when firing natural gas shall not exceed 0.00058 lb/MMBtu, or 0.11 lb/hr. [P 075-0065]
- ii. The SO<sub>x</sub> emissions when firing No. 2 fuel oil shall not exceed 60 ppmvd @ 15% O<sub>2</sub> (0.306 lb/MMBtu) or 57.4 lb/hr. [P 075-0065]
- iii. The total SO<sub>x</sub> emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 1099.3 tpy. [P 075-0065]

### **Section III: Applicable Requirements and Compliance Demonstration**

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

- i. In lieu of a CEMS for SO<sub>2</sub>, the Permittee shall obtain fuel receipts as described in 40 CFR §60.49b(r) and certify that only very low sulfur oil, as defined in 40 CFR §60.41b, was combusted during each reporting period. [P 075-0065; 40 CFR §60.47b(a) & (f)]
- ii. Annual SO<sub>x</sub> emissions shall be verified by the Permittee, by adding the current month's SO<sub>x</sub> emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure SO<sub>x</sub> emissions using EPA Method 6 stack test. [RCSA §22a-174-5(e)(2)]

#### **c. Record Keeping Requirements**

The Permittee shall maintain all recorded data required by this Title V permit at the site for a minimum of five years, commencing from the date such records were created and made available upon request by the Department. [P 075-0065; RCSA §22a-174-33(o)(2)]

#### **d. Reporting Requirements**

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner and the Administrator within three working days any exceedances of an emission limit. [RCSA §22a-174-4(d)(1)]
- ii. If there are no excess emissions during the calendar quarter, the Permittee shall submit to the commissioner and the Administrator, a report semiannually stating that no excess emissions occurred during the semiannual reporting period. [40 CFR §60.49b(h)]
- iii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### **3. TSP**

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

- i. The TSP emissions when firing natural gas shall not exceed 0.0049 lb/MMBtu or 0.95 lb/hr. [P 075-0065]
- ii. The TSP emissions when firing No. 2 fuel oil shall not exceed 0.014 lb/MMBtu or 2.66 lb/hr. [P 075-0065]
- iii. The total TSP emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 92.3 tpy. [P 075-0065]

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

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]

### **Section III: Applicable Requirements and Compliance Demonstration**

- ii. Annual TSP emissions shall be verified by the Permittee, by adding the current month's TSP emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure TSP emissions using EPA Method 5 stack test. [RCSA §22a-174-5(e)(2)]

#### **c. Record Keeping Requirements**

The Permittee shall maintain monthly and annual actual TSP emissions. The monthly TSP emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual TSP emissions shall be calculated each calendar month by adding the current calendar month's TSP emissions to those of the previous 11 months. [RCSA §22a-174-4(d)(1)]

#### **d. Reporting Requirements**

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### **4. VOC**

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

- i. The VOC emissions when firing natural gas shall not exceed 0.013 lb/MMBtu or 2.53 lb/hr. [P 075-0065]
- ii. The VOC emissions when firing No. 2 fuel oil shall not exceed 0.016 lb/MMBtu or 3.0 lb/hr. [P 075-0065]
- iii. The total VOC emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 93.7 tpy. [P 075-0065]

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

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual VOC emissions shall be verified by the Permittee, by adding the current month's VOC emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure VOC emissions using EPA Method 25 stack test. [RCSA §22a-174-5(e)(2)]

### **Section III: Applicable Requirements and Compliance Demonstration**

#### **c. Record Keeping Requirements**

The Permittee shall maintain monthly and annual actual VOC emissions. The monthly VOC emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual VOC emissions shall be calculated each calendar month by adding the current calendar month's VOC emissions to those of the previous 11 months. [P 075-0065]

#### **d. Reporting Requirements**

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### **5. CO**

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

- i. The CO emissions when firing natural gas shall not exceed 0.039 lb/MMBtu or 7.56 lb/hr. [P 075-0065]
- ii. The CO emissions when firing No. 2 fuel oil shall not exceed 0.035 lb/MMBtu or 6.65 lb/hr. [P 075-0065]
- iii. The total CO emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 313.7 tpy. [P 075-0065]

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

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual CO emissions shall be verified by the Permittee, by adding the current month's CO emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure CO emissions using EPA Method 10 stack test. [RCSA §22a-174-5(e)(2)]

#### **c. Record Keeping Requirements**

The Permittee shall maintain monthly and annual actual CO emissions. The monthly CO emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual CO emissions shall be calculated each calendar month by adding the current calendar month's CO emissions to those of the previous 11 months. [P 075-0065]

### Section III: Applicable Requirements and Compliance Demonstration

#### d. Reporting Requirements

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

#### 6. Pb

##### a. Limitation or Restriction

- i. The Pb emissions when firing No. 2 fuel oil shall not exceed 0.000003 lb/MMBtu. [P 0075-0065]
- ii. The total Pb emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 0.0263 tpy. [P 0075-0065]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual Pb emissions shall be verified by the Permittee, by adding the current month's Pb emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure Pb emissions using EPA Method 12 stack test. [RCSA §22a-174-5(e)(2)]

##### c. Record Keeping Requirements

The Permittee shall maintain monthly and annual actual Pb emissions. The monthly Pb emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual Pb emissions shall be calculated each calendar month by adding the current calendar month's Pb emissions to those of the previous 11 months. [P 075-0065]

##### d. Reporting Requirements

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### Section III: Applicable Requirements and Compliance Demonstration

#### 7. H<sub>2</sub>SO<sub>4</sub>

##### a. Limitation or Restriction

- i. The H<sub>2</sub>SO<sub>4</sub> emissions when firing natural gas shall not exceed 0.0000081 lb/MMBtu or 0.001 lb/hr. [P 075-0065]
- ii. The H<sub>2</sub>SO<sub>4</sub> emissions when firing No. 2 fuel oil shall not exceed 1.0 ppmvd @ 15% O<sub>2</sub> (0.0052 lb/MMBtu) or 0.98 lb/hr. [P 075-0065]
- iii. The total H<sub>2</sub>SO<sub>4</sub> emissions from the turbine (EU 1), the duct burner (EU 2), and package boiler (EU 3) shall not exceed 47.70 tpy. [P 075-0065]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall verify emissions using the most recent performance test data and daily parametric monitoring and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual H<sub>2</sub>SO<sub>4</sub> emissions shall be verified by the Permittee, by adding the current month's H<sub>2</sub>SO<sub>4</sub> emissions to the previous 11 months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall measure H<sub>2</sub>SO<sub>4</sub> emissions using EPA Method 8 stack test. [RCSA §22a-174-5(e)(2)]

##### c. Record Keeping Requirements

The Permittee shall maintain monthly and annual actual H<sub>2</sub>SO<sub>4</sub> emissions. The monthly H<sub>2</sub>SO<sub>4</sub> emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual H<sub>2</sub>SO<sub>4</sub> emissions shall be calculated each calendar month by adding the current calendar month's H<sub>2</sub>SO<sub>4</sub> emissions to those of the previous 11 months. [P 075-0065]

##### d. Reporting Requirements

- i. On a daily basis, the Permittee shall review data recorded and calculated for that day and report to the commissioner within three working days any exceedances of an emission limit. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

#### 8. Fuel Consumption

##### a. Limitation or Restriction

- i. The maximum hourly fuel consumption when firing natural gas shall be 189,126 cf/hr. [P 075-0065]

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- ii. The maximum hourly fuel consumption when firing No. 2 fuel oil shall be 1,329.1 gal/hr.  
[P 075-0065]

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

The Permittee shall keep monthly and annual fuel consumption.  
[RCSA §22a-174-33(j)(1)(K)(ii)]

#### **c. Record Keeping Requirements**

Documentation of fuel firing rate and maximum rated capacity shall be made by the Permittee daily. [P 075-0065]

#### **d. Reporting Requirements**

- i. The Permittee shall review recorded data daily and report to the commissioner within three working days any exceedances of an allowable limit. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### **C. EMISSIONS UNIT 4 (EU 4) - DETROIT DIESEL STARTER ENGINE**

#### **1. Work Practices and Maintenance**

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

- i. This unit shall be dedicated solely to starting the General Electric gas turbine, Model No. PG6531. These situations are defined as: [P 075-0150]
  - A. Startup of turbine. The engine is run at low speed for approximately five minutes to warm up the engine. The engine is then ramped up to full speed over the period of five minutes, then held at maximum speed for an additional five minutes. This allows the turbine to reach self-sustaining speed, at which point the startup engine is shut off. Total operation time is approximately 20 to 30 minutes per startup.
  - B. Cool down of turbine blades. During the shutdown process, the engine is used to rotate the turbine blades without combustion occurring in the turbine. This operation lasts approximately two hours.
  - C. Washing of turbine blades. The engine, operating at low speed, rotates the blades while a cleaning solution is sprayed onto the blades. This operation usually lasts about an hour and a half.
  - D. Engine testing. If the engine appears to be malfunctioning during any of the above operations, the engine may be tested for a short period (about two minutes) to check for irregularities.

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- ii. The source cannot emit continuously for a period of more than six hours. [P 075-0150]
- iii. The Permittee shall comply with the following requirements from Table 2d (Item 4) to 40 CFR Part 63 Subpart ZZZZ [40 CFR 63.6603(a)]
  - A. Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - B. Inspect air cleaner every 1, 000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - C. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- iv. The Permittee has the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement as required by Section III.C.1.a.iii.A of this Title V permit. [40 CFR Part 63 Subpart ZZZZ]

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

- i. The Permittee shall continuously comply with the work or management practices by the following: [Table 6 (Item 9) to 40 CFR Part 63 Subpart ZZZZ, 40 CFR §63.6625 (d)]
  - A. Operate and maintain the unit according to the manufacturer's emission-related operation and maintenance instructions; or
  - B. Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

#### **c. Record Keeping Requirements**

- i. If the oil analysis program as specified in Section III.C.1.a.iv of this Title V permit is utilized, The Permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. Additionally, the analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
- ii. The Permittee shall keep records of the maintenance conducted on the unit in order to demonstrate that Permittee operated and maintained the unit according to the maintenance plan. [40 CFR §63.6655(e)]
- iii. The Permittee shall keep all other required records as specified in 40 CFR §63.6655. [40 CFR Part 63 Subpart ZZZZ]

#### **d. Reporting Requirements**

- i. The Permittee shall report each instance in which it did not meet the requirements in Section III.C.1.a.iii of this Title V permit. These must be reported according to the requirements specified in 40 CFR §63.6650. [40 CFR §63.6640(b)]

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- ii. The Permittee shall report each instance it did not meet the applicable requirements in Table 8 of 40 CFR Part 63 Subpart ZZZZ. [40 CFR §63.6640(e)]
- iii. The Permittee shall submit all required reports in accordance with Sections VIII.E of this Title V permit.

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

##### a. Limitation or Restriction

The NO<sub>x</sub> emissions shall not exceed the following:

- i. 0.888 tpy. [P 075-0150]
- ii. 8 gm/bk hp-hr [RCSA §22a-174-22, Table 22-1]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall conduct an emission test to demonstrate compliance with RCSA §22a-174-22 (e) emissions limit. Such emission test shall be conducted in accordance with RCSA §22a-174-5. Compliance with the NO<sub>x</sub> emission limitation shall be determined based on the average of three (3) one-hour tests, each performed over a consecutive 60-minute period. Any analysis of nitrogen content conducted as part of such emission testing shall be in accordance with Method D-3228 of the ASTM. If the commissioner determines that three (3) one-hour tests are not reasonable given the location, configuration or operating conditions of the unit, the commissioner may approve testing where compliance with the NO<sub>x</sub> emission limitation shall be determined based on the average of four (4) 15-minute tests, each performed over a consecutive 15-minute period. [RCSA §22a-174-22(k)(1)]
- ii. The Permittee shall conduct emission testing once every five years from the date of the previous test or five years from the date the previous test was due, whichever is earlier. [RCSA §22a-174-22(k)(1)]
- iii. The Permittee shall demonstrate compliance with emission limitations of RCSA §22a-174-22 using sampling and analytical procedures approved under 40 CFR 60, Appendix A, or under procedures in RCSA §22a-174-5(d). Sampling shall be conducted when the unit is at normal operating temperature and, unless allowed otherwise by the commissioner in a permit or order, is operating at or above 90% of maximum capacity. If the commissioner determines that operating at or above 90% of maximum capacity during sampling is not reasonable given the location, configuration or operating conditions of an unit, the commissioner may approve testing at an alternative maximum capacity where compliance with the NO<sub>x</sub> emission limitations shall be determined based on operating at or above 90% of the alternative maximum capacity approved by the commissioner. [RCSA §22a-174-22(k)(2)]

##### c. Record Keeping Requirements

- i. The Permittee shall keep the following records:
  - A. Monthly and annual actual NO<sub>x</sub> emissions; [RCSA §22a-174-4(d)(1)]

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- B. All tune-ups, repairs, replacement of parts and other maintenance; [RCSA §22a-174-22(1)(1)(D)]
  - C. Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22; [RCSA §22a-174-22(1)(1)(E)]
  - D. The dates, times, and places of all emission testing required by RCSA §22a-174-22, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing; and [RCSA §22a-174-22(1)(1)(H)]
  - E. Any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(1)(1)(J)]
- ii. The Permittee shall retain all records and reports for five years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records and reports shall be retained at the source, unless the commissioner approves in writing the use of another location in the State. [RCSA §22a-174-22(1)(5)]

#### d. Reporting Requirements

- i. Within thirty (30) days of the completion of emission tests conducted under the requirements of subdivision (k)(1) of RCSA §22a-174-22, the Permittee shall submit a written report of the results of such testing to the Commissioner.
- ii. The Permittee shall submit a report on NO<sub>x</sub> emissions from such source, in the annual Emission Statement. [RCSA §22a-174-4(d)(1)]

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

#### a. Limitation or Restriction

The SO<sub>x</sub> emissions shall not exceed 0.087 tpy. [P 075-0150]

#### b. Monitoring and Testing Requirements

The Permittee shall calculate monthly and annual actual SO<sub>x</sub> emissions. The monthly SO<sub>x</sub> emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual SO<sub>x</sub> emissions shall be calculated each calendar month by adding the current calendar month's SO<sub>x</sub> emissions to those of the previous 11 months. [RCSA §22a-174-4(d)(1)]

#### c. Record Keeping Requirements

The Permittee shall maintain monthly and annual actual SO<sub>x</sub> emissions. [RCSA §22a-174-4(d)(1)]

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#### d. Reporting Requirements

The Permittee shall provide all records to the commissioner within 30 days of receipt of a written request from the commissioner. [RCSA §22a-174-4(d)(1)]

#### 4. PM-10

##### a. Limitation or Restriction

The PM-10 emissions shall not exceed 0.016 tpy. [P 075-0150]

##### b. Monitoring and Testing Requirements

The Permittee shall calculate monthly and annual actual PM-10 emissions. The monthly PM-10 emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual PM-10 emissions shall be calculated each calendar month by adding the current calendar month's PM-10 emissions to those of the previous 11 months. [RCSA §22a-174-4(d)(1)]

##### c. Record Keeping Requirements

The Permittee shall maintain monthly and annual actual PM-10 emissions. [RCSA §22a-174-4(d)(1)]

##### d. Reporting Requirements

The Permittee shall provide all records to the commissioner within 30 days of receipt of a written request from the commissioner. [RCSA §22a-174-4(d)(1)]

#### 5. VOC

##### a. Limitation or Restriction

The VOC emissions shall not exceed 0.026 tpy. [P 075-0150]

##### b. Monitoring and Testing Requirements

The Permittee shall calculate monthly and annual actual VOC emissions. The monthly VOC emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual VOC emissions shall be calculated each calendar month by adding the current calendar month's VOC emissions to those of the previous 11 months. [RCSA §22a-174-4(d)(1)]

##### c. Record Keeping Requirements

The Permittee shall maintain monthly and annual actual VOC emissions. [RCSA §22a-174-4(d)(1)]

##### d. Reporting Requirements

The Permittee shall provide all records to the commissioner within 30 days of receipt of a written request from the commissioner. [RCSA §22a-174-4(d)(1)]

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#### 6. CO

##### a. Limitation or Restriction

The CO emissions shall not exceed 0.232 tpy. [P 075-0150]

##### b. Monitoring and Testing Requirements

The Permittee shall calculate monthly and annual actual CO emissions. The monthly CO emissions shall be calculated using emission factors obtained from the latest stack test or from the latest version of AP-42 and the fuel usage. Annual CO emissions shall be calculated each calendar month by adding the current calendar month's CO emissions to those of the previous 11 months. [RCSA §22a-174-4(d)(1)]

##### c. Record Keeping Requirements

The Permittee shall maintain monthly and annual actual CO emissions.  
[RCSA §22a-174-4(d)(1)]

##### d. Reporting Requirements

The Permittee shall provide all records to the commissioner within 30 days of receipt of a written request from the commissioner. [RCSA §22a-174-4(d)(1)]

#### 7. Fuel Consumption

##### a. Limitation or Restriction

This fuel consumption shall be restricted to 4,150 gallons of diesel per year or less per consecutive 12 month period of operation. [P 075-0150]

##### b. Monitoring and Testing Requirements

- i. Each oil fuel shipment for this unit shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. Each shipping receipt and certification shall be kept on site and available for inspection by the Bureau upon request. [P 075-0150]
- ii. Annual operating hours and fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding the current month's fuel usage and operating hours to that of the previous 11 months. These calculations shall be made on a monthly basis and made available for inspection by this Bureau upon request. [P 075-0150]
- iii. When more than one fuel supply tank is to service this source or when multiple sources are supplied by one fuel tank, a fuel metering device shall be used to continuously monitor fuel feed to this Title V permitted source. [P 075-0150]

### Section III: Applicable Requirements and Compliance Demonstration

#### c. Record Keeping Requirements

The calculations of the annual operating hours and fuel consumption shall be made on a monthly basis and made available for inspection by this Bureau upon request. [P 075-0150]

#### d. Reporting Requirements

The Permittee shall provide all records to the commissioner within 30 days of receipt of a written request from the commissioner. [RCSA §22a-174-4(d)(1)]

### D. EMISSIONS UNIT 10 (EU 10) - DIESEL POWERED BOILER FEED WATER PUMP ENGINE

#### 1. Hours of Operation

##### a. Limitation or Restriction

i. The Permittee shall operate the EU 10 according to the following requirements. If the Permittee does not operate the engine in accordance with the following requirements, the engine will not be considered an emergency engine under 40 CFR 60 Subpart ZZZZ and must meet all of the requirements for non-emergency engines. [40 CFR §63.6640(f)]:

A. There is no time limit on the use of the engine in emergency situations.

B. The Permittee may operate the unit for a maximum of 100 hours per calendar year for the reason listed in Section III.D.1.a.i.B(1) of this Title V permit. Any operation for non-emergency situations as allowed by Section III.D.1.a.i.C of this Title V permit is included as part of the 100 hours allowed by this paragraph.

1. Each emergency engine 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 owner or operator 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 owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency engine beyond 100 hours per calendar year. [40 CFR §63.6640(f)(2)(i)]

C. The unit may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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)]

### **Section III: Applicable Requirements and Compliance Demonstration**

- ii. During periods of startup, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.  
[40 CFR §63.6625(h)]

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

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

#### **c. Record Keeping Requirements**

- i. The Permittee shall keep records of the hours of operation of the engine 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.  
[40 CFR §63.6655(f)]
- ii. The Permittee shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.  
[40 CFR §63.6655(f)]

#### **d. Reporting Requirements**

The Permittee shall submit all required reports in accordance with Sections VIII.E of this Title V permit.

### **2. Work Practices and Maintenance**

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

- i. The Permittee shall comply with the following requirements from Table 2d (Item 4) to 40 CFR Part 63 Subpart ZZZZ [40 CFR 63.6603(a)]
  - A. Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - B. Inspect air cleaner every 1, 000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - C. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- ii. The Permittee has the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement as required by Section III.C.2.a.i.A of this Title V permit. [40 CFR Part 63 Subpart ZZZZ]

## Section III: Applicable Requirements and Compliance Demonstration

### b. Monitoring and Testing Requirements

- i. The Permittee shall continuously comply with the work or management practices by the following:  
[Table 6 (Item 9) to 40 CFR Part 63 Subpart ZZZZ, 40 CFR §63.6625 (d)]
  - A. Operate and maintain the unit according to the manufacturer's emission-related operation and maintenance instructions; or
  - B. Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

### c. Record Keeping Requirements

- i. If the oil analysis program as specified in Section III.C.1.a.iv of this Title V permit is utilized, The Permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. Additionally, the analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
- ii. The Permittee shall keep records of the maintenance conducted on the unit in order to demonstrate that Permittee operated and maintained the unit according to the maintenance plan. [40 CFR §63.6655(e)]
- iii. The Permittee shall keep all other required records as specified in 40 CFR §63.6655. [40 CFR Part 63 Subpart ZZZZ]

### d. Reporting Requirements

- i. The Permittee shall report each instance in which it did not meet the requirements in Section III.C.1.a.iii of this Title V permit. These must be reported according to the requirements specified in 40 CFR §63.6650. [40 CFR §63.6640(b)]
- ii. The Permittee shall report each instance it did not meet the applicable requirements in Table 8 of 40 CFR Part 63 Subpart ZZZZ. [40 CFR §63.6640(e)]
- iii. The Permittee shall submit all required reports in accordance with Sections VIII.E of this Title V permit.

## E. EMISSIONS UNIT 12 (EU 12) - SAFETY KLEEN METAL PARTS CLEANER

### 1. VOC

#### a. Limitation or Restriction

- i. The Permittee shall equip the unit with a cover designed so that it can be easily operated with one hand. [RCSA §22a-174-20(1)(3)(A)]

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- ii. The Permittee shall equip the unit with a facility for draining cleaned parts constructed internally so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the unit. [RCSA §22a-174-20(1)(3)(B)]
- iii. The Permittee shall install one of the following control devices if the solvent vapor pressure is greater than 4.3 kilo pascals (33 millimeters of mercury or 0.6 pounds per square inch) measured at 38 degrees Celsius (100 degrees Fahrenheit) or if the solvent is heated above 50 degrees Celsius (120 degrees Fahrenheit):
  - A. freeboard that gives a freeboard ratio greater than or equal to 0.7;
  - B. water cover (solvent must be insoluble in and heavier than water); or other systems of equivalent control, equal to that of a "refrigerated chiller" or
  - C. carbon absorption approved by the commissioner by permit or order.

#### b. Monitoring and Testing Requirements

The Permittee shall maintain a monthly record of the amount of solvent added to the unit. [RCSA §22a-174-20(1)(3)(k)]

#### c. Record Keeping Requirements

The Permittee shall keep a monthly record of the amount of solvent added to the unit and keep such record for a minimum of five years after such record is made. [RCSA §22a-174-20(1)(3)(k); RCSA §22a-174-33(o)(2)]

#### d. Reporting Requirements

The Permittee shall provide all records to the commissioner within 30 days of receipt of a written request from the commissioner. [RCSA §22a-174-4(d)(1)]

### 2. Operating and Maintenance Requirements

- i. The Permittee shall store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, in a manner such that greater than 20 percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere. [RCSA §22a-174-20(1)(3)(C)]
- ii. The Permittee shall close the cover whenever parts are not being handled in the cleaner for two minutes or more, or when the device is not in use. [RCSA §22a-174-20(1)(3)(D)]
- iii. The Permittee shall drain the cleaned parts for at least 15 seconds or until dripping ceases, whichever is longer. [RCSA §22a-174-20(1)(3)(E)]
- iv. If used, the Permittee shall supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure which does not exceed ten pounds per square inch as measured at the pump outlet and shall perform such spraying within the confines of the cold cleaning unit. [RCSA §22a-174-20(1)(3)(F)]

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- v. The Permittee shall minimize the drafts across the top of each cold cleaning unit such that whenever the cover is open the unit is not exposed to drafts greater than 40 meters per minute, as measured between one and two meters upwind, and at the same elevation as the tank lip. [RCSA §22a-174-20(1)(3)(H)]
- vi. The Permittee shall not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired. [RCSA §22a-174-20(1)(3)(I)]
- vii. The Permittee shall provide a permanent, conspicuous label on or posted near each unit summarizing the applicable operating requirements. [RCSA §22a-174-20(1)(3)(J)]

#### **F. EMISSIONS UNIT 17 (EU 17) - CLEAVER-BROOKS PACKAGE BOILER**

##### **1. Fuel Consumption**

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

- i. The natural gas usage shall not exceed 214 million cubic feet in any 12 month rolling aggregate and the No. 2 fuel oil usage shall not exceed 704,000 gallons in any 12 month rolling aggregate. [RCSA §22a-174-3b(c)(1)(B)(i)]
- ii. The maximum rated heat input shall not exceed 50 MMBtu/hr when burning natural gas and 25 MMBtu/hr when burning No. 2 fuel oil. [RCSA §22a-174-3b(c)(1)(A)]
- iii. The NO<sub>x</sub> emissions when burning natural gas and No. 2 fuel oil shall not exceed 0.20 lb/MMBtu.

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

- i. The Permittee shall properly maintain and operate the unit in accordance with the limitation or restriction requirements given above (Section III.E.1.a of this Title V permit). [RCSA §22a-174-3b(c)(1)]
- ii. The Permittee shall perform a tune-up of the units on an annual basis. [RCSA §22a-174-3b(c)(1)(E)]
- iii. The Permittee shall make and maintain records of the fuel type and quantity used, in million cubic feet, for each month and each 12 month rolling aggregate. [RCSA §22a-174-3b(c)(3)(A)]
- iv. If multiple fuels are used, the Permittee shall keep records of the quantity in tons of each criteria pollutant emitted for each month and each 12 month rolling aggregate. [RCSA §22a-174-3b(c)(3)(C)]
- v. The Permittee shall make and maintain records of the date each annual tune-up is performed. [RCSA §22a-174-3b(c)(3)(D)]

###### **c. Record Keeping Requirements**

The Permittee shall maintain all records for five years from the date such record is created. [RCSA §22a-174-3b(c)(2)(B)]

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### d. Reporting Requirements

The Permittee shall make all records kept to determine compliance with RCSA §22a-174-3b(c) available to the commissioner to inspect and copy upon request.  
[RCSA §22a-174-3b(c)(2)(A)]

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

### a. Limitation or Restriction

None, except for monitoring, recordkeeping, and reporting requirements. (See below)  
[40 CFR §60.48c]

### b. Monitoring and Testing Requirements

Compliance with the SO<sub>2</sub> standard shall be determined by the Permittee by recording and maintaining records of the amount of fuel combusted during each calendar month. [40 CFR §60.48c(g)(2)]

### c. Record Keeping Requirements

- i. Compliance with the SO<sub>2</sub> standard shall be determined by the Permittee by recording and maintaining records of the amount of fuel combusted during each calendar month. [40 CFR §60.48c(g)(2)]
- ii. The Permittee shall keep information necessary for the commissioner to determine compliance with the requirements of this section. Such data shall be maintained at the site for a minimum of five years, commencing from the date such records were created and made available upon request by the commissioner. [RCSA §22a-174-3b(c)(2)]
- iii. The Permittee shall provide all records to the commissioner within 30 days of receipt of a written request from the commissioner. [RCSA §22a-174-33(j)(1)(K)(ii)]

### d. Reporting Requirements

The Permittee shall provide records to the commissioner within 30 days of receipt of a written request from the commissioner or such sooner time as the commissioner may require.  
[RCSA §22a-174-33(j)(1)(K)(ii)]

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

### a. Limitation or Restriction

The NO<sub>x</sub> emissions when burning natural gas and No. 2 fuel oil shall not exceed 0.20 lb/MMBtu. [RCSA §22a-174-22(e)]

### **Section III: Applicable Requirements and Compliance Demonstration**

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

- i. The Permittee shall conduct an emission test to demonstrate compliance with the NO<sub>x</sub> emissions limit no later than one year after construction. Each such emission test shall be conducted in accordance with RCSA §22a-174-5 of the Regulations of Connecticut State Agencies. Compliance with the NO<sub>x</sub> emission limitation shall be determined based on the average of three (3) one-hour tests, each performed over a consecutive 60-minute period. Any analysis of nitrogen content conducted as part of such emission testing shall be in accordance with Method D-3228 of the ASTM. If the commissioner determines that three (3) one-hour tests are not reasonable given the location, configuration or operating conditions of the unit, the commissioner may approve testing where compliance with the NO<sub>x</sub> emission limitation shall be determined based on the average of four (4) fifteen-minute tests, each performed over a consecutive fifteen-minute period. [RCSA §22a-174-22(k)(1)]
- ii. The Permittee shall conduct emission testing once every five years from the date of the previous test or five years from the date the previous test was due, whichever is earlier. [RCSA §22a-174-22(k)(1)]

#### **c. Record Keeping Requirements**

- i. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance. [RCSA §22a-174-22(l)(1)(D)]
- ii. The Permittee shall keep copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22. [RCSA §22a-174-22(l)(1)(E)]
- iii. The Permittee shall keep the procedures for calculating NO<sub>x</sub> emission rates. [RCSA §22a-174-22(l)(1)(G)]
- iv. The permittee shall keep records of the dates, times, and places of all emission testing required, 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)]
- v. The Permittee shall retain all records and reports produced for five (5) years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records and reports shall be retained at the source, unless the Commissioner approves in writing the use of another location in the State. [RCSA §22a-174-22(l)(5)]

#### **d. Reporting Requirements**

Within thirty (30) days of the completion of emission tests, the Permittee shall submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22(l)(2)]

### Section III: Applicable Requirements and Compliance Demonstration

#### G. 112(r) ACCIDENTAL RELEASE REQUIREMENTS

Should any of the units, as defined in 40 CFR §68.3, become subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit a risk management plan pursuant to 40 CFR §68.12 by the date specified in 40 CFR §68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR §70.6(c)(5).

#### H. STRATOSPHERIC OZONE DEPLETING SUBSTANCES (40 CFR PART 82) REQUIREMENTS FOR GEU 2 – TWO CENTRIFUGAL CHILLERS

The Permittee shall comply with the standards for recycling and emissions reduction of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E (Labeling of Products Using Ozone-Depleting Substances) and Subpart F (Recycling and Emission Reduction). The specific subsections that may apply, depending on whether a CDECCA technician or an outside contractor is performing a covered activity, are as follows:

**Subpart E:** Section 82.102  
Section 82.104  
Section 82.106  
Section 82.108  
Section 82.110  
Section 82.112; and  
Section 82.124

**Subpart F:** Section 82.154(a), (b), (e), (i), and (n)  
Section 82.156(a), (b), (c), (d), (e), and (i)  
Section 82.161  
Section 82.166(b), (k), (l), (m), (n), (o), (p), and (q)

#### I. ACID RAIN PROGRAM – SO<sub>2</sub> ALLOWANCE ALLOCATIONS

SO<sub>2</sub> Allowance Allocation (tons/year) for EU 1, Under Tables 2, 3, or 4 of 40 CFR Part 73 [Acid Rain Permit 75-001-TIV]:

#### J. CAIR NOX OZONE SEASON TRADING

Emissions Unit 1 (EU 1) is a CAIR NO<sub>x</sub> Ozone season unit and therefore subject to RCSA §22a-174-22c. The unit shall comply with all applicable requirements stated in RCSA §22a-174-22c and the standard requirements of the CAIR permit application.

## Section IV: Premises-Wide General Requirements

<b>Table IV: Premises-Wide General Requirements</b>		
<b>Pollutants or Process Parameters</b>	<b>Applicable Regulatory References/Citations</b>	<b>Compliance Demonstration Requirements</b>
Annual Emission Statements	RCSA §22a-174-4	1. The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4(d)(1).
Emission Testing	RCSA §22a-174-5	2. The Permittee shall comply with the procedures for sampling, emission testing, sample analysis, and reporting as set forth in RCSA §22a-174-5.
Emergency Episode Procedures	RCSA §22a-174-6	3. The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
Reporting of Malfunctioning Control Equipment	RCSA §22a-174-7	4. The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
Prohibition of Air Pollution	RCSA §22a-174-9	5. The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
Public Availability of Information	RCSA §22a-174-10	6. The public availability of information shall apply, as set forth in RCSA §22a-174-10.
Prohibition Against Concealment/ Circumvention	RCSA §22a-174-11	7. The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
Violations and Enforcement	RCSA §22a-174-12	8. The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
Variances	RCSA §22a-174-13	9. 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.
No Defense to Nuisance Claim	RCSA §22a-174-14	10. The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.
Severability	RCSA §22a-174-15	11. The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
Responsibility to Comply	RCSA §22a-174-16	12. The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.

**Section IV: Premises-Wide General Requirements**

<b>Table IV: Premises-Wide General Requirements, continued</b>		
<b>Pollutants or Process Parameters</b>	<b>Applicable Regulatory References/Citations</b>	<b>Compliance Demonstration Requirements</b>
Particulate Emissions	RCSA §22a-174-18	13. 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.)
Sulfur Compound Emissions	RCSA §22a-174-19	14. The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §22a-174-19.
Organic Compound Emissions	RCSA §22a-174-20	15. The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
Carbon Monoxide Emissions	RCSA §22a-174-21	16. The Permittee shall comply with the requirements for control of carbon monoxide emissions as set forth in RCSA §22a-174-21.
Nitrogen Oxide Emissions	RCSA §22a-174-22	17. The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22.
Emission Fees	RCSA §22a-174-26	18. The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).

**Section V: Compliance Schedule**

<b>Table V: COMPLIANCE SCHEDULE</b>				
<b>Emissions Unit</b>	<b>Applicable Regulations</b>	<b>Steps Required for Achieving Compliance (Milestones)</b>	<b>Date by which each Step is to be Completed</b>	<b>Dates for Monitoring, Record Keeping, and Reporting</b>
N/A				

## Section VI: State Enforceable Terms and Condition

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.

- A.** 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.

Compliance with the H<sub>2</sub>SO<sub>4</sub> MASC shall be achieved for EU 1 & 2 by:

1. Operating EU 2 exclusively on natural gas; or
2. By limiting the maximum SO<sub>x</sub> emitted from EU 1 & 2 when operating interchangeably by the following equation:

$$[EU\ 1(MMBtu/hr) * 0.0128\ lb/MMBtu + EU\ 2(MMBtu/hr) * 0.045\ lb/MMBtu] < 10.4\ lb/hr$$

- B.** 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.
- C.** 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 Title V permit issued to the Permittee by the commissioner.
- 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 beyond the property boundary of the premises in accordance with the provisions of RCSA §22a-174-23. Failure to comply with this requirement may result in the assessment of civil penalties and/or the issuance of a State Order.
- 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.** Open Burning: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS Section 22a-174(f).
- G.** Fuel Sulfur Content: The Permittee shall not use No. 2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS Section 16a-21a.
- H.** Reporting of emissions of greenhouse gases: In accordance with CGS Section 22a-200b(b), not later than April 15, 2006, and annually thereafter, the owner or operator of any facility that is required to report air emissions data to the Department of Energy and Environmental Protection pursuant to Title V of the federal Clean Air Act and that has stationary emissions sources that emit greenhouse gases shall report to the regional registry direct stack emissions of greenhouse gases from such sources. The owner or operator shall report all greenhouse gas emissions in a type and format that the regional registry can accommodate.
- 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.

## Section VII: Permit shield

### NO PERMIT SHIELD GRANTED

In accordance with RCSA §22a-174-33(k), a Permittee complying with the conditions of this Title V permit shall be deemed in compliance with any applicable requirements identified in Table VI below as of the date of issuance. Also, in accordance with RCSA §22a-174-33(k), a Permittee complying with the conditions of this Title V permit shall be deemed exempt from any non-applicable requirements identified below as of the date of issuance.

This Title V permit shall not alter or affect the following:

- A. The provisions of section 303 of the Clean Air Act, including the authority of the Administrator under the Act;
- B. The liability of an owner or operator of a Title V source for any violation of applicable requirements prior to or at the effective date of a Title V permit;
- C. The applicable requirements of the acid rain program under 40 CFR Part 72; and
- D. The ability of the Administrator or commissioner to obtain information from the owner or operator of a Title V source.

<b>Table VII: PERMIT SHIELD</b>				
<b>Regulated Pollutants</b>	<b>Emissions Units</b>	<b>Applicable Requirement or Non-Applicable Requirement Descriptions</b>	<b>Applicable Regulatory References/ Citations</b>	<b>*Permit Shield Indicate</b>
N/A				

**\*For "Permit Shield Indicate", use AR to indicate Applicable Requirement and NR for Non- Applicable Requirement**

## **Section VIII: 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 these sections.

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

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

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

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

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

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

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

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

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

## Section VIII: Title V Requirements

one or more manufacturing, production or operating facilities subject to RCSA §22a-174-33 and either:

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

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

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, within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this Title V permit or of any change in any information contained in the application, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the changed, corrected, or omitted information to the commissioner.

### **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

## **Section VIII: Title V Requirements**

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

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

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

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

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

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

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

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

## Section VIII: Title V Requirements

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

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

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

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

Notwithstanding Subsection D of Section VIII 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 22a-174-33(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;

## Section VIII: Title V Requirements

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 (B) unless imposition of such limits is required by an applicable requirement.

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

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

### **N. PERMIT AVAILABILITY**

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

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

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

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

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

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

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

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

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

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

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

## Section VIII: Title V Requirements

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

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

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.

## **Section VIII: Title V Requirements**

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.