



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>	178-0086-TV
<b>Client/Sequence/Town/Premises Numbers</b>	8785/02/178/0005
<b>Date Issued</b>	May 28, 2021
<b>Expiration Date</b>	May 28, 2026

**Corporation:**

*Sikorsky Aircraft Corporation*

**Premises Location:**

*6900 Main Street, Stratford, Connecticut 06615-9129*

**Name of Responsible Official and Title:**

*George D. Mitchell, Jr., Vice President, Rotary Systems, Production Operations*

All the following attached pages, 2 through 71, are hereby incorporated by reference into this Title V permit.

  
Tracy R. Babbidge

Betsey C. Wingfield  
Deputy Commissioner

May 28, 2021

Date

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## **Title V Operating Permit**

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

## LIST OF ABBREVIATIONS/ACRONYMS

<i>Abbreviation/Acronym</i>	<i>Description</i>
AEDC	Aeromechanics Development Center
ASTM	American Society for Testing and Materials
°C	Degree Celsius
CFR	Code of Federal Regulations
CI	Compression Ignition
CGS	Connecticut General Statutes
CO	Carbon Monoxide
EU	Emissions Unit
EPA	Environmental Protection Agency
°F	Degree Fahrenheit
g	Grams
gal	Gallon
GEU	Grouped Emissions Unit
H <sub>2</sub> O	Water
HAP	Hazardous Air Pollutant
HEPA	High Efficiency Particulate Air
hp	Horsepower
hr	Hour
HVLP	High Volume Low Pressure
ICE	Internal Combustion Engine
in	Inches
J	Joules
kW	Kilowatts
l or L	Liter
lb	Pound
MMBtu	Million British Thermal Unit
MMft <sup>3</sup>	Million Cubic Feet
mmHg	Millimeters of Mercury
MRC	Maximum Rated Capacity
MSDS	Material Safety Data Sheet
MW	Megawatt
MWh	Megawatt hour
MY	Model Year
NAICS	North American Industry Classification System
ng	Nanogram
NMHC	Non Methane Hydro-carbon
NO <sub>x</sub>	Nitrogen Oxides
O <sub>2</sub>	Oxygen
Pb	Lead
PM	Particulate Matter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns
PM <sub>10</sub>	Particulate Matter less than 10 microns
ppmw	Parts per million, weight
ppmvd	Parts per million, volume, dry
RCSA	Regulations of Connecticut State Agencies
RICE	Reciprocating Internal Combustion Engine
scf	Standard Cubic Feet

## LIST OF ABBREVIATIONS/ACRONYMS, continued

<i>Abbreviation/Acronym</i>	<i>Description</i>
SCR	Selective Catalytic Reduction
SI	Spark Ignition
SIC	Standard Industrial Code
SO <sub>2</sub>	Sulfur Dioxide
TPY	Tons per year
TSP	Total Suspended Particulates
ULSD	Ultra Low Sulfur Diesel
VOC	Volatile Organic Compound

## Section II: Emissions Units Information

### A. PREMISES INFORMATION

Name of Business: Sikorsky Aircraft Corporation  
Primary SIC: 3721  
NAICS: 336411

Facility Mailing Address: 6900 Main Street, P.O. Box 9729, Stratford, CT 06615-9129  
Telephone Number: (203) 386-4000

### B. PREMISES DESCRIPTION

Sikorsky Aircraft Corporation (Sikorsky)'s main plant, located at 6900 Main Street in Stratford, is used for the manufacture and overhaul/repair of military and commercial helicopters. The facility consists of 20 major buildings totaling approximately 2.4 million square feet, on 248.6 acres of land. Sikorsky is a Title V source located in a severe ozone non-attainment area defined in RCSA §22a-174-1. **Sikorsky exceeds the major source threshold for VOC and HAPs.** Sikorsky has a premises wide cap for NO<sub>x</sub> (collateral condition in Permit No. 178-0129), and as such the premises is considered minor for NO<sub>x</sub>. The main manufacturing process activities conducted at the facility include machining, forming of sheet metal and composite parts, heat treating, metal finishing and etching, rotor blade manufacturing, wiring harness fabrication, assembly of gear boxes and transmissions/rotor heads, painting and depainting, and final assembly of aircraft. Other facility operations include aircraft/rotor blade/transmission testing, fueling, engineering, laboratory research, shipping/receiving, purchasing, administration, maintenance, wastewater treatment, and the generation of steam, compressed air and chilled water.

The principal materials used in the manufacturing processes and facility operations include:

- Aluminum, titanium, magnesium, carbon steel, and stainless steel
- Various acids, caustics, plating solutions, and rinsewaters
- Various coolants, and quench, cutting, and lubricating oils
- Natural gas, fuel oil, jet fuel, gasoline, methanol, and liquid nitrogen and argon
- Primers, topcoats, solvents, and paint strippers
- Fiberglass, Kevlar, graphite and boron cloth, and related resins
- Various sealants and adhesives

### Fuel Burning Sources

#### Powerhouse

Steam and electricity are provided by a cogeneration facility (EU-24) consisting of a 10 MW Solar Mars 100 Axial Turbine with dry SoLoNO<sub>x</sub>, or lean premix gas turbine with a natural gas fired 34.6 MMBtu/hr duct burner and a heat recovery steam generator (HRSG). The duct burner is not capable of being operated alone. The turbine burns natural gas and ULSD as backup. The duct burner burns natural gas only. Emissions are controlled by SCR and an oxidation catalyst. The cogeneration facility operates under Permit No. 178-0129 and is subject to 40 CFR Part 60 Subpart KKKK – Standard of Performance for Stationary Combustion Turbines; as well as 40 CFR Part 63 Subpart YYYY – National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (currently stayed).

Backup steam generation is provided by four registered boilers (GEU-1). Three boilers are operated on either natural gas or ULSD fuel oil; the fourth combusts natural gas only. The boilers are subject to RCSA §22a-174-22f and 40 CFR Part 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

## Section II: Emissions Units Information

### B. PREMISES DESCRIPTION, continued

#### Emergency Engines

Emergency engines power various generators and fire pumps. Emergency engines power various generators and fire pumps. Some of the emergency engines are subject to the requirements of RCSA §§22a-174-3b and 22a-174-22f. The engines also operate under the following requirements, as applicable:

- 40 CFR Part 63 Subpart ZZZZ - National Emissions Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
- 40 CFR Part 60 Subpart III – National Emissions Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

#### VOC Sources

##### Paint Booths

Painting is generally done using water-reducible primers, high solids (low VOC) topcoats and aerospace “specialty coatings.” Paint overspray is controlled either with dry filters or water systems. The site has a number of spray paint booths that are operating under New Source Review permits (GEU-4), the requirements of RCSA §22a-174-3b (EU-23) or are not subject to RCSA §22a-174-3a. With the exception of the Aeromechanical Development Center (AEDC paint booth) the booths are subject to the requirements of RCSA §22a-174-20(s) and 40 CFR Part 63 Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities (EU-11, EU-12, EU-17 through EU-23).

#### Miscellaneous VOC Sources

##### Handwiping

Solvent cleaning of parts is generally performed manually, using pre-moistened “wipes” for both metal and non-metal aircraft parts (GEU-5). The cleaning is done prior to adhesive bonding, sealing and priming. The wipe cleaning is subject to RCSA §22a-174-20(ii) and 40 CFR Part 63 Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities. The majority of the wipe cleaning operations is performed using non-HAP and/or low vapor pressure solvents.

##### Cold Cleaning

Removal of oils and greases is performed by soaking the parts in cold cleaners using non-chlorinated solvents (GEU-3). These are subject to RCSA §22a-174-20(i). There are no vapor degreasers at the facility.

##### Nital Etch

The Nital Etch tank (EU-15) is a surface temper inspection process using denatured ethanol. It operates under collateral conditions in Permit Nos. 178-0035, 178-0078 and 178-0128.

##### Paint Gun Cleaning

Paint gun cleaning associated with the paint booths is primarily the use of automated enclosed spray gun cleaners (GEU-6). Paint gun cleaners are subject to RCSA §22a-174-20(jj) and 40 CFR Part 63 Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities.

##### Paint Removal

The depainting of entire aircraft is no longer performed. Parts or sections of aircraft are depainted by mechanical means or using conventional Methylene Chloride-based or non-HAP paint strippers.



## Section II: Emissions Units Information

### A. EMISSIONS UNITS DESCRIPTION

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

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION</b>			
<b>Emissions Unit/ Grouped Emissions Unit</b>	<b>Emissions Unit Description</b>	<b>Control Unit Description</b>	<b>Permit, Registration, or Regulation Number</b>
EU-1/ GEU-1	Wickes Boiler No. 1  Power House  Natural Gas and ULSD fuel oil  MRC: Derated to 43.1 MMBtu/hr for natural gas and 39.4 MMBtu/hr for ULSD fuel oil  Constructed: January 1958	None	Registration No. 178-0016-R  RCSA §22a-174-22f  40 CFR Part 63 Subpart DDDDD
EU-2/ GEU-1	Wickes Boiler No. 2  Power House  Natural Gas and ULSD fuel oil  MRC: Derated to 44.3 MMBtu/hr for natural gas and 39 MMBtu/hr for ULSD fuel oil  Constructed: January 1958	None	Registration No. 178-0017-R  RCSA §22a-174-22f  40 CFR Part 63 Subpart DDDDD
EU-3/ GEU-1	Wickes Boiler No. 3  Power House  Natural Gas and ULSD fuel oil  MRC: Derated to 39 MMBtu/hr for natural gas and 37.3 MMBtu/hr for ULSD fuel oil  Constructed: January 1958	None	Registration No. 178-0018-R  RCSA §22a-174-22f  40 CFR Part 63 Subpart DDDDD
EU-4/ GEU-1	Wickes Boiler No. 4  Power House  Natural Gas  MRC: Derated to 42 MMBtu/hr for	None	Registration No. 178-0019-R  RCSA §22a-174-22f  40 CFR Part 63 Subpart DDDDD

## Section II: Emissions Units Information

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION</b>			
<b>Emissions Unit/ Grouped Emissions Unit</b>	<b>Emissions Unit Description</b>	<b>Control Unit Description</b>	<b>Permit, Registration, or Regulation Number</b>
	natural gas  Constructed: January 1958		
GEU-2	Fire Pump No. 1 (EU-6) Fire Pump No. 2 (EU-7) Fire Pump No. 3 (EU-8) Fire Pump No. 4 (EU-9)  Four Caterpillar 3406 TA-W 2.94 MMBtu/hr each 420 hp/313 kW each CI < 500 hp  ULSD fuel oil  Between Powerhouse and vehicle maintenance garage  Constructed: January 2003	None	RCSA §22a-174-3b(e)  RCSA §22a-174-22f  40 CFR Part 63 Subpart ZZZZ
GEU-3	Cold Cleaners	Cover	RCSA §22a-174-20(1)(3)
EU-11	Special Prime Paint Booth  Column E5  Constructed: 1981	3 Stage Dry Filter	RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-12	Blade Prime (Bond) Paint Booth  Column E11  Constructed: 1955/1994	Pumpless Waterwash	RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-15	Solution Tank GN276 – Nital Etch - Column X11  Constructed: 1979	Cover/Wet Scrubber	Collateral Condition in Permit Nos. 178-0035, 0078 and 0128
EU-17/ GEU-4	Dyescan Booth  Column K10  Constructed: October 2006	3 Stage Dry Filter	Permit No. 178-0128  RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-18/ GEU-4	Blades Spray Booth  Column J17	3 Stage Dry Filter	Permit No. 178-0078  RCSA §22a-174-20(s)

## Section II: Emissions Units Information

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION</b>			
<b>Emissions Unit/ Grouped Emissions Unit</b>	<b>Emissions Unit Description</b>	<b>Control Unit Description</b>	<b>Permit, Registration, or Regulation Number</b>
	Constructed: 1998		40 CFR Part 63 Subpart GG
EU-19/ GEU-4	Paint Spray Booth, Small Parts  Column Z16  Constructed: May 1984	Downflow Waterwall	Permit No. 178-0035  RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-20/ GEU-4	Finishes Paint Cell No. 1  Column Z18  Constructed: May 1984	Horizontal Waterfloor	Permit No. 178-0035  RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-21/ GEU-4	Finishes Paint Cell No. 2  Column Z19  Constructed: May 1984	Horizontal Waterfloor	Permit No. 178-0035  RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-22/ GEU-4	Finishes Paint Cell No. 3  Column Z19  Constructed: May 1984	Horizontal Waterfloor	Permit No. 178-0035  RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-23	VH Parts No. 4 Paint Booth  Column Z18  Constructed: 1998	3 Stage Dry Filter	RCSA §22a-174-3b  RCSA §22a-174-20(s)  40 CFR Part 63 Subpart GG
EU-24	Cogeneration Facility Consisting of a 10 MW Solar Mars Gas Turbine, Cleaver Brooks Energy Recovery/Natcom Duct Burner and Cleaver Brooks Energy Recovery Heat Recovery Steam Generator  Constructed: November 2009	SCR and Oxidation Catalyst	Permit No. 178-0129  RCSA §22a-174-22f  40 CFR Part 60 Subpart KKKK  40 CFR Part 63 Subpart YYYY
GEU-5	Hand Wiping Operations	None	RCSA §22a-174-20(ii)  40 CFR Part 63 Subpart GG
GEU-6	Spray Gun Cleaning Operations	None	RCSA §22a-174-20(jj)  40 CFR Part 63 Subpart GG

## Section II: Emissions Units Information

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION</b>			
<b>Emissions Unit/ Grouped Emissions Unit</b>	<b>Emissions Unit Description</b>	<b>Control Unit Description</b>	<b>Permit, Registration, or Regulation Number</b>
EU-25/ GEU-7	Generac 3698480200 Emergency Generator 0.16 MMBtu/hr 20 hp/15 kW SI < 500 hp  Natural Gas  Guard Station  Constructed: July 1993	None	40 CFR Part 63 Subpart ZZZZ
EU-26/ GEU-7	Kohler 60ROZJ Emergency Generator 0.58 MMBtu/hr 83 hp/62 kW CI <500 hp  ULSD Fuel Oil  Fire Department  Constructed: July 1993	None	40 CFR Part 63 Subpart ZZZZ
EU-28/ GEU-8	Generac SD010 Emergency Generator (Interim Tier 4) 0.34 MMBtu/hr 49 hp/37 kW  ULSD Fuel Oil  Tower  Constructed: January 2017	None	40 CFR Part 60 Subpart III
EU-30	Kohler Model 250REOZJE Emergency Generator (Tier 3) 2.70 MMBtu/hr 385 hp/287 kW  ULSD  Data Center  Constructed: 2019	None	RCSA §22a-174-22f  40 CFR Part 63 Subpart III
EU-31/ GEU-8	Generac Model SD050 Emergency Generator (Tier 3)	None	40 CFR Part 60 Subpart III

## Section II: Emissions Units Information

<b>TABLE II.A: EMISSIONS UNITS DESCRIPTION</b>			
<b>Emissions Unit/ Grouped Emissions Unit</b>	<b>Emissions Unit Description</b>	<b>Control Unit Description</b>	<b>Permit, Registration, or Regulation Number</b>
	0.59 MMBtu/hr 85 hp/63 kW  ULSD  Phone Room  Constructed: 2019		
EU-32	Volvo Penta TWD1672GE “Rental” Emergency Engine (Tier 4)  Gross power output standby: 624 kW/836 hp  Outside Medical Department at Column A14 ULSD fuel oil  Worst case 5.85 MMBtu/hr CI>500 hp  Model Year 2019  Constructed: December 2020	SCR and Ammonia slip catalyst	RCSA §22a-174-22f  40 CFR Part 60 Subpart III
EU-33	Cummins 450DFEJ Emergency Generator (Tier 2)  Gross power output standby: 563 kW/755 hp  Waste Water treatment Plant ULSD Fuel Oil  Worst case 5.28 MMBtu/hr CI>500 hp  Constructed: December 2020	None	RCSA §22a-174-3b(e)  RCSA §22a-174-22f  40 CFR Part 60 Subpart III

## Section II: Emissions Units Information

### B. OPERATING SCENARIO IDENTIFICATION

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

<b>TABLE II.B: OPERATING SCENARIO IDENTIFICATION</b>	
<b>Emissions Units Associated with the Scenario</b>	<b>Description of Scenario</b>
GEU-2 (EU-6 through EU-9), GEU-7 (EU-25, EU-26), GEU-8 (EU-28, EU-31), EU-30, EU-32, EU-33	<b>Emergency engines:</b> the standard use of the emergency engines is to provide emergency power (electrical and fire pumps) for operations at the facility in case of a utility power outage, brownout, maintenance or other emergency. Some engines burn ULSD fuel oil and some burn natural gas.
GEU-1 (EU-1, EU-2, EU-3 and EU-4)	<b>Boilers:</b> the standard use of the boilers is to provide steam for process tanks, building heating, hot water and to operate some absorption chillers. Three registered boilers burn ULSD fuel oil and natural gas. The fourth burns natural gas only.
GEU-3	<b>Cold cleaners:</b> the standard use of the parts cleaners is to clean miscellaneous metal parts.
EU-24	<b>Combustion turbine and duct burner:</b> the standard use of the combustion turbine and duct burner is to provide electrical power and steam for building heating and cooling. The combustion turbine burns natural gas and ULSD fuel oil. The duct burner burns natural gas only.
GEU-4 (EU-17, EU-18, EU-19, EU-20, EU-21 and EU-22), EU-11, EU-12 and EU-23	<b>Paint Booths:</b> the standard use of paint booth is to apply topcoats, primers, and specialty coatings to miscellaneous metal parts, composite parts, aircraft interior and exteriors.
GEU-5	<b>Hand Wiping Operation:</b> the standard use of pre-moistened “wipes” is for solvents cleaning of metal and non-metal parts of aircraft by hand.
EU-15	<b>Solution Tank GN276:</b> the standard use of solution tank GN276 is as a surface temper etch inspection tank.
GEU-6	<b>Spray Gun Cleaning Operations:</b> the standard use of spray gun cleaners is to clean paint spray guns after use.

### Section III: Applicable Requirements and Compliance Demonstration

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

#### A. GROUPED EMISSIONS UNIT 1 (GEU-1)

Four Registered boilers subject to RCSA §§22a-174-18, 22a-174-19(b), 22a-174-22f, and 40 CFR Part 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters

EU-1: Wickes boiler No. 1 - Registration No. 178-0016-R

EU-2: Wickes boiler No. 2 - Registration No. 178-0017-R

EU-3: Wickes boiler No. 3 - Registration No. 178-0018-R

EU-4: Wickes boiler No. 4 - Registration No. 178-0019-R

#### 1. Fuel Type, Sulfur Content Limit and TSP

##### a. Limitation or Restriction

- i. The Permittee shall only burn natural gas or ULSD fuel oil in boilers Nos. 1 through 3. [Registration Nos. 178-0017, 178-0018 and 178-0019]
- ii. The Permittee shall only burn natural gas in boiler No. 4. [Registration No. 178-0016]
- iii. TSP emissions shall not exceed 0.12 lb/MMBtu when operating on ULSD fuel oil, and 0.10 lb/MMBtu when operating on natural gas. [RCSA §22a-174-18(e)]
- iv. The Permittee shall not combust fuel in a stationary source that contains sulfur in excess of 15 ppm (0.0015%) by weight. [RCSA §22a-174-19b(d)]

##### b. Monitoring Requirements

The commissioner may require the Permittee to analyze for the sulfur content of liquid fuels, which shall be done according to the American Society for Testing and Materials method 4294, D7039 or the most current method approved by the American Society for Testing and Materials for the analysis of sulfur content of liquid fuels. [RCSA §22a-174-5(b)(1)]

##### c. Record Keeping Requirements

- i. The Permittee shall maintain a shipping receipt and certification from the fuel supplier certifying the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, by dry basis, and the method used by the fuel supplier to determine the sulfur content of such fuel; or a copy of the current contract with specifying the name of the fuel supplier, the type or grade of fuel delivered, and the sulfur content of the fuel. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

##### d. Reporting Requirements

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

### Section III: Applicable Requirements and Compliance Demonstration

#### 2. NO<sub>x</sub>: RCSA §22a-174-22f

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

- i. The Permittee of an emissions unit that is not an emergency engine or an affected unit that exceeds the NO<sub>x</sub> emission threshold in RCSA §22a-174-22f(e)(2)(A) shall submit the notification required by RCSA §22a-174-22f(h) within 60 days of the day on which the threshold is first exceeded and shall operate the emissions unit in compliance with RCSA §22a-174-22e no later than 270 days after the day on which the threshold is first exceeded. [RCSA §22a-174-22f(e)(2)]
- ii. The Permittee may conduct tune-ups according to the schedule and procedures of the applicable requirements of 40 CFR Part 63 Subpart DDDDD. If the period between tune-ups in the applicable requirements of 40 CFR Part 63 Subpart DDDDD is greater than 60 months, a tune-up shall be conducted at least once every 60 months. [RCSA §22a-174-22f(f)(2)]

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

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

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

- i. The Permittee shall make and keep the following records:  
[RCSA §22a-174-22f(g)(2)(A) through (F)]
  - (A) During the period from May 1 to September 30, inclusive, records sufficient to determine the NO<sub>x</sub> emissions (lb) per day;
  - (B) A calculation of NO<sub>x</sub> emissions on each day of operation, performed no later than the last day of each month for everyday of operation in the preceding month;
  - (C) The method used to calculate daily NO<sub>x</sub> emissions and the information used to determine the NO<sub>x</sub> emissions rate chosen from the options in RCSA §22a-174-22f(g)(2)(C)(i) through(v);
  - (D) The date and work performed for repairs, replacement of parts and other maintenance;
  - (E) For emissions unit's tune-up conducted pursuant to RCSA §22a-174-22f(f), the date on which the emissions unit is tuned-up; the name, title and affiliation of the person performing the tune-up, and a description of work performed; and
  - (F) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22f.
- ii. The Permittee shall retain all records and reports produced pursuant to RCSA §22a-174-22f 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 premises where the emissions unit is located. [RCSA §22a-174-22f(g)(1)]



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#### d. Reporting Requirements

- i. If an emissions unit exceeds the daily NO<sub>x</sub> emission threshold in Section III.A.2.a of this Title V permit, the Permittee shall submit a notification to the Compliance Analysis and Coordination Unit, Bureau of Air Management at the Department. Such a notification shall be submitted no later than 60 days after the date on which daily NO<sub>x</sub> emissions thresholds were exceeded and shall include the information in RCSA §22a-174-22f(h). [RCSA §22a-174-22f(h)]
- ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

#### 3. 40 CFR Part 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

- Initial notification was submitted on December 31, 2012
- Notification of Compliance Status was submitted on March 10, 2016
- Gas 1 units
- Continuous oxygen trim system
- These boilers are not subject to the emission limits in 40 CFR Part 63 Subpart DDDDD

#### a. Limitation or Restriction

- i. The Permittee shall operate each boiler as a Gas 1 Unit. Each boiler will not be subject to emission limits in Tables 1, 2 or 11 through 13 or the operating limits in Table 4 of 40 CFR Subpart DDDDD. [40 CFR §63.7500(e)]
- ii. Each boiler operating as a Gas 1 unit, may only burn ULSD for the following reasons:  
[40 CFR §63.7575]
  - (A) For periodic testing of liquid fuel, maintenance or operator training, not to exceed 48 hours during any calendar year; and
  - (B) During periods of natural gas curtailment or gas supply interruption of any duration.
- iii. The Permittee must conduct a tune-up of the units every five years as specified in 40 CFR §63.7540. [40 CFR Part 63 Subpart DDDDD – Table 3, Item 1]

#### b. Monitoring and Testing Requirements

The Permittee must monitor the following: [40 CFR §63.7555(h)]

- i. Total hours per calendar year that ULSD is burned; and
- ii. The total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.

#### c. Record Keeping Requirements

- i. The Permittee shall keep a copy of each notification and report submitted to comply with 40 CFR Part 63 Subpart DDDDD, including all documentation supporting any notification of compliance status or semiannual reports submitted. [40 CFR §63.7555(a)(1)]

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- ii. The Permittee shall keep records of all performance tests, fuel analysis or other compliance demonstrations and performance evaluations. [40 CFR §63.7555(a)(2)]
- iii. The Permittee shall keep records of the total hours per calendar year that ULSD is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. [40 CFR §63.7555(h)]
- iv. The Permittee shall keep records for a period of five years from the date that each record was created and must make them available upon request. [40 CFR §§63.7560(b) and (c)]

#### *d. Reporting Requirements*

- i. The Permittee shall submit a notification of compliance status for each boiler before the close of business on the 60<sup>th</sup> day following the completion of initial compliance demonstration in accordance with 40 CFR §63.7545. [40 CFR §63.7545(e)]
- ii. If ULSD is used to fire any boiler during a period of natural gas curtailment or supply interruption as defined in 40 CFR §63.7575, the Permittee shall submit to the Department a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption in accordance with 40 CFR §63.7545. [40 CFR §63.7545(f)]
- iii. If the Permittee switches fuels or makes a physical change to any of the boilers and the switch in fuel or physical change resulted in the applicability of a different subcategory, the Permittee must provide notice within 30 days of the switch/change of the date either the fuel was switch or the physical change was made in accordance with 40 CFR §63.7545. [40 CFR §63.7545(h)]
- iv. The Permittee shall submit the five year compliance report in accordance with 40 CFR §§63.7550(b), (c), (d) and (e). [40 CFR §63.7550(b)]
- v. The Permittee must submit all applicable compliance reports electronically to the Environmental Protection Agency in accordance with 40 CFR §§63.7550(h)(1) through (3). [40 CFR §63.7550]

#### **4. PM: RCSA §22a-174-18**

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

The Permittee of a stationary source for which opacity is measured using visual observation shall not exceed the following visible emission limitation: [RCSA §22a-174-18(b)(1)]

- i. 20% opacity during any six-minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9; or
- ii. 40% opacity as measured by 40 CFR Part 60, Appendix A, Reference method 9, reduced to one-minute block average.

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

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

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

The Permittee shall make and keep records showing compliance with the limitation requirements in

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Section III.A.4.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### d. Reporting Requirements

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

#### B. GROUPED EMISSIONS UNIT 2: (GEU-2: EU-6, EU-7, EU-8, EU-9), EU-32, EU-33

GEU-2: Emergency Engines

EU-6: Fire Pump No. 1

EU-7: Fire Pump No. 2

EU-8: Fire Pump No. 3

EU-9: Fire Pump No. 4

- GEU-2: These emergency engines operate under RCSA §22a-174-3b(e).
- GEU-2: These emergency engines are subject to RCSA §22a-174-22f.
- GEU-2: These emergency engines are subject to 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

EU-32: Volvo Penta “Rental” Emergency Engine

EU-33: WWTP Emergency Engine

- EU-32: This emergency engine is not subject to RCSA §22a-174-3a because potential emissions are less than 15 tons per year for any air pollutant.
- EU-33: This emergency engine operates under RCSA §22a-174-3b(e).
- EU-32 and EU-33: These emergency engines are subject to RCSA §22a-174-22f.
- EU-32 is a certified Tier 4 engine. It is exempt from the requirements of RCSA §22a-174-22f(d)(2) because the engine is a model year 2013 or later in compliance with the engine NOx emission standards of 40 CFR 1039, Subpart B in accordance with RCSA §22a-174-22f(d)(3). There is record keeping associated with EU-32 pursuant to RCSA §22a-174-22f(d)(1).
- EU-32 and EU-33 are subject to 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Engines

#### 1. Operational Restrictions: Maximum Hours of Operation, Fuel Sulfur Content and Non-Emergency Operation (GEU-2 and EU-33)

##### a. Limitation or Restriction

- i. The Permittee shall only operate each emergency engine as an emergency engine as defined in RCSA §22a-174-22e. [RCSA §§22a-174-22e and 22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall not allow any of the emergency engines to operate except during periods of

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testing and scheduled maintenance or during an emergency and unless the following conditions are met: [RCSA §22a-174-3b(e)(2)]

- (A) The Permittee shall operate each emergency engine for a maximum of 300 hours during any 12 month rolling aggregate. [RCSA §22a-174-3b(e)(2)(C)]
- (B) Any non-gaseous fuel consumed by each engine shall not exceed the sulfur content of motor vehicle diesel fuel where “motor vehicle diesel fuel” is defined in RCSA §22a-174-42. [RCSA §22a-174-3b(e)(2)(D)]

#### *b. Monitoring Requirements*

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

#### *c. Record Keeping Requirements*

The Permittee shall make and keep the following records:

- i. Hours of operation for each month and each 12 month rolling aggregate. [RCSA §22a-174-3b(e)(4)]
- ii. Any of the records listed below are sufficient to demonstrate the sulfur content of fuel used: [RCSA §§22a-174-3b(h)(1) through (3)]
  - (A) A fuel certification for a delivery of non-gaseous fuel from a bulk petroleum provider;
  - (B) A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
  - (C) A copy of the current contract with the fuel supplier supplying the fuel as a condition of each shipment.
- iii. All records above shall be maintained for a period of five years and made available to the commissioner to inspect and copy upon request. [RCSA §22a-174-3b(e)(3)]

#### *d. Reporting Requirements*

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

### **2. NOx: RCSA §22a-174-22f (GEU-2, EU-32, EU-33)**

Note: Emergency engines do not have emission limits for NOx under RCSA §22a-174-22f; however, there are record keeping and reporting requirements.

#### *a. Limitation or Restriction*

For GEU-2 and EU-33 only, the Permittee shall not operate the engine for routine, schedule testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to

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unhealthy for sensitive groups” or greater. If subsequent to the initial forecast of “moderate to unhealthy for sensitive groups” or greater, the forecast is revised to “moderate” or lower, the Permittee is no longer prohibited from operating the engine for routine, schedule testing or maintenance for the remainder of the day. The operator of an emergency engine may rely on an ozone forecast of “moderate” or lower obtained by 3 p.m. on the preceding day. Subsequent changes to the ozone forecast after 3 p.m. that forecast ozone levels of “moderate to unhealthy for sensitive groups” or greater shall not obligate the Permittee to refrain from operation of the emergency engine at the facility on the following day.  
[RCSA §22a-174-22f(d)(2)]

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

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

#### *c. Record Keeping Requirements*

i. The Permittee of an emergency engine shall make and keep the following records:  
[RCSA §22a-174-22f(g)(3)]

- (A) For EU-32 and EU-33, daily records of the operating hours of such engine, identifying the operating hours of emergency and non-emergency use and the reason for each period of emergency and non-emergency operation;
- (B) For GEU-2, records required by 40 CFR §63.6655;
- (C) The date and work performed for repairs, replacement of parts and other maintenance; and
- (D) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22f.

ii. The Permittee shall retain all records and reports for five years. Such records and report shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records and reports shall be retained at the premises where the emission unit is located, unless the commissioner approves in writing the use of another location in Connecticut.  
[RCSA §22a-174-22f(g)(1)]

#### *d. Reporting Requirements*

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

### **3. 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine (GEU-2)**

Notes:

- Each emergency engine in GEU-2 is an Existing Emergency Compression Ignition Engine ≤ 500 hp located at a major source of HAPs, constructed before June 12, 2006. The four emergency engines do not operate and are not contractually obligated to be available for purposes of emergency demand response. Compliance Date: May 3, 2013.
- The emergency engines in GEU-2 are not subject to the numerical emission limitations in 40 CFR Part 63

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Subpart ZZZZ pursuant to 40 CFR §63.6602 and 40 CFR Part 63 Subpart ZZZZ, Table 2c (1).

- Since the emergency engines in GEU-2 are not subject to the numerical emission limitations in 40 CFR Part 63 Subpart ZZZZ, they are not subject to the notifications specified in 40 CFR §63.6645(a).

*a. Limitations or Restrictions*

- i. The Permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR §63.6602; 40 CFR Part 63 Subpart ZZZZ, Table 2c (1)(a)]
- ii. The Permittee shall inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR §63.6602; 40 CFR Part 63 Subpart ZZZZ, Table 2c(1)(b)]
- iii. The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR §63.6602; 40 CFR Part 63 Subpart ZZZZ, Table 2c(1)(c)]
- iv. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in 40 CFR 63 Subpart ZZZZ, Table 2c, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR Part 63 Subpart ZZZZ, Table 2c, Footnote 1]
- v. At all times the Permittee shall operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if required levels have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR §63.6605(b)]
- vi. The Permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per calendar year. [40 CFR §63.6640(f)(2)(i)]
- vii. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR Part 63 Subpart ZZZZ, Table 2c. The oil analysis program must be performed at the same frequency specified for changing the oil in 40 CFR Part 63 Subpart ZZZZ, Table 2c. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are

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exceeded, the engine owner or operator must change the oil within two business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within two business days or before commencing operation, whichever is later. [40 CFR §63.6625(i)]

#### *b. Monitoring Requirements*

- i. The Permittee shall operate and maintain the stationary RICE according to the manufacturer's emission related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.  
[40 CFR §63.6625(e); 40 CFR §63.6640(a); 40 CFR Part 63 Subpart ZZZZ, Table 6 (9)(a)]
- ii. 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 make and keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
- ii. The Permittee shall make and keep records to show continuous compliance with each applicable work practice required in 40 CFR Part 63 Subpart ZZZZ, Table 6. [40 CFR §63.6655(d)]
- iii. The Permittee shall make and keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE according to the Permittee's own maintenance plan. [40 CFR §63.6655(e)]
- iv. The Permittee shall make and keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must 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 (maintenance and readiness testing). [40 CFR §63.6655(f)]
- v. The Permittee shall keep each record readily accessible in hard copy or electronically form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR §63.10(b)(1). [40 CFR §63.6660(c)]

#### *d. Reporting Requirements*

- i. The Permittee shall report each instance in which they did not meet each operating limitation in 40 CFR Part 63 Subpart ZZZZ, Table 2c. These instances are deviations from the operating limitations in 40 CFR Part 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR §63.6650. [40 CFR §63.6640(b)]
- ii. The Permittee shall report any failure to perform the engine's work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.  
[40 CFR Part 63 Subpart ZZZZ, Table 2c, Footnote 1]
- iii. For each deviation from an operating limitation that occurs for a stationary RICE where a continuous monitoring system is not used to comply with the operating limitations of 40 CFR Part 63 Subpart

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ZZZZ, the compliance report must contain the following information: [40 CFR §63.6650(d)]

- (A) Company name and address;
- (B) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
- (C) Date of report and beginning and ending dates of the reporting period;
- (D) Number, duration and brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions, including the corrective action taken to correct a malfunction;
- (E) The total operating time of the stationary RICE at which the deviation occurred during the reporting period; and
- (F) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

#### **4. 40 CFR Part 60 Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engine (EU-32 and EU-33)**

Notes:

- EU-32 and EU-33 meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart III.
  - In accordance with 40 CFR §60.4214(b) the owner or operator of an emergency stationary internal combustion engine of a CI internal combustion engine is not required to submit an initial notification.
  - EU-32 (Rental – MY2019): 5.85 MMBtu (836 hp/615 kW) Volvo Penta TWD1672GE emergency engine. The emergency engine was evaluated under the following parameters: 2007 model year and later, stationary CI ICE 560 – 900 kW with displacement of less than 10 liters per cylinder that is not a fire pump.
  - EU-33 (WWTP - MY 2019): 5.28 MMBtu/hr (755 hp/563 kW) Cummins 450DFEJ emergency engine. The emergency engine was evaluated under the following parameters: 2007 model year or later emergency CI ICE <30 l/cyl, stationary CI ICE>560 kW with displacement of less than 10 liters per cylinder, that is not a fire pump.
- a. *Emission Standards, Fuel Requirements and Annual Hours of Operation*
- i. The Permittee of a 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that is not a fire pump engine must comply with the emission standards for new non-road CI engines in 40 CFR §60.4202, for all pollutants, for the same year and maximum engine power for EU-32 and EU-33. [40 CFR §60.4205(b)]
  - ii. The Permittee shall ensure that EU-32 and EU-33 are certified to the emission standards in 40 CFR §60.4205(b) for the same model year and maximum engine power for CO, PM and (NO<sub>x</sub> + NMHC). [40 CFR §60.4211(c)]



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- iii. The Permittee must use diesel fuel that meets the requirements of 40 CFR §1090.305 for nonroad engines. [40 CFR §60.4207(b)]
- iv. The Permittee must operate EU-32 and EU-33 according to the following requirements to be considered an emergency engine under 40 CFR Part 60 Subpart IIII:  
[40 CFR §§60.4211(f)(1), (2)(i) and (3)]
  - (A) For EU-32 only: There is no limit on the use of the emergency stationary ICE in emergency situations.
  - (B) For EU-32 only: 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 as provided in Section III.B.4.a.iii.(C) of this Title V permit.
  - (C) The Permittee may operate EU-32 and EU-33 for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require the maintenance and testing of the ICE beyond 100 hours per calendar year.  
[40 CFR §60.4211(f)(2)(i)]

#### *b. Monitoring Requirements*

The Permittee shall install a non-resettable hour meter prior to the start-up of EU-32 and EU-33 each.  
[40 CFR §60.4209(a)]

#### *c. Record Keeping Requirements*

- i. The Permittee shall keep records of the hours of operation of EU-32 and EU-33 each in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of each engine and the reason the engine was in operation during that time. [40 CFR §60.4214(b)]
- ii. The Permittee shall keep records to show that EU-32 and EU-33 are certified to comply with the emission limitations in 40 CFR §§60.4205(b), 60.4202 and 40 CFR Part 60 Subpart IIII – Table 2.  
[40 CFR §60.4211(c)]
- iii. The Permittee shall maintain records that demonstrate the diesel fuel purchased for use in EU-32 and EU-33 complies with Section III.B.4.a.iii of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iv. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

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

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#### C. GROUPED EMISSIONS UNIT 7 (GEU-7): EU-25, EU-26

Notes:

- EU-25 and EU-26: These engines are not subject to RCSA §22a-174-3a because potential emissions of any air pollutant are less than 15 TPY.
  - EU-25 and EU-26: These engines are not subject to RCSA §22a-174-22f because each emergency engines is less than 1 MMBtu/hr.
  - EU-25 and EU-26: These engines are subject to 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine.
  - EU-25 and EU-26: These engines are not subject to the numerical emission limitations in 40 CFR Part 63 Subpart ZZZZ. [40 CFR Part 63 Subpart ZZZZ – Table 2c(1)]
  - EU-25 and EU-26: These engines are not subject to the notification specified in 40 CFR §63.6645(a). [40 CFR §63.6645(a)(5)]
1. **40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine.**
- EU-25 (Guards): The emergency engine is an Existing Emergency Spark Ignition Engine; < 500 hp located at a major source of HAPs constructed before June 12, 2006 and does not operate nor is contractually obligated to be available for purposes of emergency demand response. Compliance Date: October 19, 2013
  - EU-26 (Fire Department): The emergency engine is an Existing Emergency Compression Ignition Engine < 500 hp located at a major source of HAPs constructed before June 12, 2006. The emergency engines do not operate and are not contractually obligated to be available for purposes of emergency demand response. Compliance Date: May 3, 2013
- a. *Limitations or Restrictions*
- i. The Permittee must operate the emergency stationary RICE according to the following requirements:
    - (A) There is no limit on the use of emergency stationary RICE in emergency situations. [40 CFR §63.6640(f)(1)]
    - (B) The Permittee may operate the emergency stationary RICE for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee 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)]

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- ii. The Permittee may operate the emergency stationary RICE 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 provided in Section III.C.1.a.i.(B) of this Title V permit. [40 CFR §63.6640(f)]  
Note: The Permittee must maintain compliance with these operating limitations in order to be considered an emergency engine and maintain exemption from other requirements of 40 CFR Part 63 subpart ZZZZ.
- iii. The Permittee must comply with the following requirements:  
[40 CFR Part 63 Subpart ZZZZ – Table 2c; Option 1 for EU-25 and Option 6 for EU-26]
  - (A) EU-25 and EU-26: Change oil and filter every 500 hours of operation or annually whichever comes first.
  - (B) EU-25: Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
  - (C) EU-26: Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replaced as necessary.
  - (D) EU-25 and EU-26: Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replaced as necessary.
  - (E) EU-25: During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emissions apply.
- iv. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in 40 CFR 63 Subpart ZZZZ, Table 2c, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR Part 63 Subpart ZZZZ, Table 2c, Footnote 1]
- v. At all times the Permittee shall operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if required levels have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR §63.6605(b)]
- vi. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR Part 63 Subpart ZZZZ, Table 2c. The oil analysis program must be performed at the same frequency specified for changing the oil in 40 CFR Part 63 Subpart ZZZZ, Table 2c. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new;

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viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within two business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within two business days or before commencing operation, whichever is later. [40 CFR §63.6625(i)]

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

- i. The Permittee shall operate and maintain the stationary RICE according to the manufacturer's emission related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.  
[40 CFR §63.6625(e); 40 CFR §63.6640(a); 40 CFR Part 63 Subpart ZZZZ, Table 6 (9)(a)]
- ii. 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 must keep records of the operation of the engine in emergency and non-emergency service through the non-resettable hour meter. The Permittee must record the time of operation of the engine and the reason was in operation during that time. [40 CFR §63.6655(f)]
- ii. The Permittee shall make and keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
- iii. The Permittee shall make and keep records to show continuous compliance with each applicable work practice required in 40 CFR Part 63 Subpart ZZZZ, Table 6. [40 CFR §63.6655(d)]
- iv. The Permittee shall make and keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE according to the Permittee's own maintenance plan. [40 CFR §63.6655(e)]
- v. The Permittee shall keep each record readily accessible in hard copy or electronically form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR §63.10(b)(1). [40 CFR §63.6660(c)]

#### *d. Reporting Requirements*

- i. The Permittee shall report each instance in which they did not meet each operating limitation in 40 CFR Part 63 Subpart ZZZZ, Table 2c. These instances are deviations from the operating limitations in 40 CFR Part 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR §63.6650. [40 CFR §63.6640(b)]
- ii. The Permittee shall report any failure to perform the engine's work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.  
[40 CFR Part 63 Subpart ZZZZ, Table 2c, Footnote 1]

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- iii. For each deviation from an operating limitation that occurs for a stationary RICE where a continuous monitoring system is not used to comply with the operating limitations of 40 CFR Part 63 Subpart ZZZZ, the compliance report must contain the following information: [40 CFR §63.6650(d)]
- (A) Company name and address;
  - (B) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
  - (C) Date of report and beginning and ending dates of the reporting period;
  - (D) Number, duration and brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions, including the corrective action taken to correct a malfunction;
  - (E) The total operating time of the stationary RICE at which the deviation occurred during the reporting period; and
  - (F) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

#### **D. GROUPED EMISSIONS UNIT 8 (GEU-8): EU-28 and EU-31**

Notes:

- EU-28 and EU-31: These emergency engines are not subject to RCSA §22a-174-3a because each emergency engine has potential emissions less than 15 TPY for any air pollutant.
- EU-28 and EU-31: These emergency engines are not subject to RCSA §22a-174-22f because they are less than 1 MMBtu/hr.
- EU-28 and EU-31: These emergency engines are subject to 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engine.
- EU-28 and EU-31: These emergency engines comply with 40 CFR Part 63 Subpart ZZZZ by operating under the requirements of 40 CFR Part 60 Subpart IIII.
- EU-28 and EU-31: These emergency engines are not required to submit an initial notification pursuant to 40 CFR §60.4214(b).

#### **1. 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engine**

- EU-28 (MY 2016): 0.34 MMBtu/hr (49 hp/37 kW) Generac SD010 emergency generator. The emergency engine was evaluated under the following parameters: 2007 model year, stationary CI ICE 19 < kW < 37 with a displacement of less than 10 liters per cylinder that is not a fire pump.
- EU-31 (MY 2018): 0.35 MMBtu/hr (85 hp/63 kW) Generac SD050 emergency generator. The emergency engine was evaluated under the following parameters: 2007 model year, stationary CI ICE 37 – 75 kW with displacement of less than 10 liters per cylinder that is not a fire pump.

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#### *a. Limitation or Restriction*

- i. The Permittee of a 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that is not a fire pump engine must comply with the emission standards for new nonroad CI engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for each engine in GEU-8. [40 CFR §60.4205(b)]
- ii. The Permittee shall ensure each engine in GEU-8 is certified to the emission standards in 40 CFR §60.4205(b) for the same model year and maximum engine power for CO, PM and (NO<sub>x</sub> + NMHC). [40 CFR §60.4211(c)]
- iii. The Permittee must operate each engine in GEU-8 according to the following requirements for each to be considered an emergency engine under 40 CFR Part 60 Subpart III: [40 CFR §§60.4211(f)(1), (2)(i) and (3)]
  - (A) For each engine in GEU-8, there is no limit on the use of the emergency stationary ICE in emergency situations.
  - (B) For each engine in GEU-8, 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 as provided in Section III.D.1.a.iii.(C) of this Title V permit.
  - (C) The Permittee may operate each engine in GEU-8 for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require the maintenance and testing of the ICE beyond 100 hours per calendar year. [40 CFR §60.4211(f)(2)(i)]
- iv. The Permittee must use diesel fuel that meets the requirements of 40 CFR §1090.305 for nonroad diesel fuel. [40 CFR §60.4207(b)]

#### *b. Monitoring Requirements*

The Permittee shall install a non-resettable hour meter prior to startup of each engine in GEU-8. [40 CFR §60.4209(a)]

#### *c. Record Keeping Requirements*

- i. The Permittee shall keep records that each engine in GEU-8 is certified to comply with the emission limitations in 40 CFR §§60.4205(b), and 60.4202(a)(1)(ii), Table 2.
- ii. The Permittee shall keep records of the hours of operation of each engine in GEU-8 in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of each engine and the reason the engine was in operation during that time. [40 CFR §60.4214(b)]

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- iii. The Permittee shall maintain records that demonstrate the diesel fuel purchased for use in GEU-8 complies with Section III.D.1.a.iv of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iv. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

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

### **E. EMISSIONS UNIT 30 (EU-30)**

- EU-30: This emergency engine is not subject to RCSA §22a-174-3a, because potential emissions are less than 15 tons per year for any air pollutant.
- EU-30: This emergency engine is subject to RCSA §22a-174-22f.
- EU-30: This emergency engine is subject to 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engine. By meeting the requirements of 40 CFR 60 Subpart IIII, no further requirements apply under 40 CFR 63 Subpart ZZZZ.

#### **1. NO<sub>x</sub> – RCSA §22a-174-22f**

Note: Emergency engines do not have emission limits for NO<sub>x</sub>, however, there are record keeping and reporting requirements.

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

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

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

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

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

- i. The Permittee of an emergency engine shall retain all records and reports produced for five years. Such records and reports shall be made available for inspection at reasonable hours by the commissioner or the Administrator. Such records and reports shall be retained at the premises where EU-30 is located, unless the commissioner approves in writing the use of another location in Connecticut. [RCSA §22a-174-22f(g)(1)]

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

- ii. The Permittee shall make and keep the following records: [RCSA §22a-174-22f(g)(3)]
  - (A) daily records of the operating hours, identifying the operating hours of emergency and non-emergency use and the reason for each period of emergency or non-emergency operation.
  - (B) The date and work performed for repairs, replacement of parts and other maintenance; and
  - (C) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22f.

#### *d. Reporting Requirements*

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

### **2. 40 CFR Part 60 Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engine**

- EU-30 (MY 2018): Certified 2.35 MMBtu/hr (335 hp/250 kW) Kohler 250REOZJE emergency engine. This engine was evaluated under the following parameters: 2007 Model year and later, stationary CI ICE 225-450 kW with a displacement of less than 10 liters per cylinder.
- EU-30: This emergency engine complies with the requirements of 40 CFR Part 63 Subpart ZZZZ by operating under the requirements of 40 CFR Part 60 Subpart III.
- EU-30: This emergency engine is not subject to the submittal of the initial notification in accordance with 40 CFR §60.4214(b).

#### *a. Limitation or Restrictions*

- i. The Permittee of a 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that is not a fire pump engine must comply with the emission standards for new nonroad CI engines in 40 CFR §60.4202, for all pollutants, for the same model year and later emergency stationary CI ICE. [40 CFR §60.4205(b)]
- ii. The Permittee shall install and configure EU-30 according to the manufacturer's emission related specifications to show compliance with the emission standards in 40 CFR §60.4205(b) for the same model year and maximum engine power. [40 CFR §60.4211(c)]
- iii. The Permittee must operate EU-30 according to the following requirements:  
[40 CFR §§60.4211(f)(1), (2)(i) and (3)]
  - (A) There is no limit on the use of the emergency stationary ICE in emergency situations.
  - (B) 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 as provided in Section III.E.2.a.iii.(C) of this Title V permit.
  - (C) The Permittee may operate EU-30 for a maximum of 100 hours per calendar year 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



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with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require the maintenance and testing of the ICE beyond 100 hours per calendar year.

- iv. The Permittee must use diesel fuel that meets the requirements of 40 CFR §1090.305 for non-road diesel fuel. [40 CFR §60.4207(b)]

#### *b. Monitoring Requirements*

The Permittee shall install a non-resettable hour meter prior to startup of the engine. [40 CFR §60.4209(a)]

#### *c. Record Keeping Requirements*

- i. The Permittee shall keep records of the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR §60.4214(b)]
- ii. The Permittee shall maintain records that demonstrate the diesel fuel purchased for use in EU-30 complies with Section III.E.2.a.iv of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

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

- F. EMISSIONS UNIT 24 (EU-24):** Cogeneration facility consisting of a 10 MW SOLAR Mars 100 Axial Gas Turbine with dry SoLoNO<sub>x</sub>, or lean premix gas turbine, Cleaver Brooks Energy Recovery/Natcom Duct Burner and Cleaver Brooks Energy Recovery Heat Recovery Steam Generator operating under Permit No. 178-0129, subject to 40 CFR Part 60 Subpart KKKK - New Performance Standards for Stationary Combustion Turbines and 40 CFR Part 63 Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.

### **1. Fuel Type, Fuel Consumption, Percent Sulfur and Operational Conditions**

#### *a. Limitation or Restriction*

- i. The Permittee shall only burn ULSD fuel oil and natural gas in the combustion turbine. [Permit No. 178-0129]
- ii. The Permittee shall only burn natural gas in the duct burner. [Permit No. 178-0129]
- iii. The combustion turbine is limited to 810,110 gallons of ULSD fuel oil and 1,068 MMft<sup>3</sup> of natural gas over any consecutive 12 month period. [Permit No. 178-0129]
- iv. The duct burner is limited to 298 MMft<sup>3</sup> of natural gas over any consecutive 12 month period. [Permit No. 178-0129]

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- v. The sulfur content for ULSD fuel oil shall not exceed 0.0015% by weight on a dry basis. [Permit No. 178-0129]
- vi. The fuel sulfur content for natural gas shall not exceed 20.0 grains/100 scf. [Permit No. 178-0129]
- vii. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. The Permittee shall operate and maintain this stationary combustion turbine, duct burner, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including startup, shutdown and malfunction. [40 CFR §60.4333(a); Permit No. 178-0129]
- viii. The Permittee shall properly operate the control equipment at all times that this turbine/duct burner is in operation and emitting air pollutants. [Permit No. 178-0129]
- ix. In the event a malfunction cannot be corrected within three hours, the Permittee shall immediately institute shutdown of the turbine. [Permit No. 178-0129]

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

The Permittee shall use an individual non-resettable totalizing fuel metering device or a billing meter to continuously monitor the natural gas and ULSD fuel oil feeds to the turbine and the natural gas feed to the duct burner. [Permit No. 178-0129]

#### *c. Record Keeping Requirements*

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the previous month. [Permit No. 178-0129]
- ii. The Permittee shall keep the following records: [Permit No. 178-0129]
  - (A) The fuel certification for each delivery of fuel oil from a bulk petroleum provider; or
  - (B) The sulfur content shall be analyzed in accordance with the American Society for Testing and Material (ASTM) test method D4294-10, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry, or D7039-07, Standard Test Method for Sulfur in Gasoline and Diesel Fuel by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry, or the current active version thereof, and automatic sampling equipment shall conform to ASTM test method D4177-95 (2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, or the current active version thereof. [RCSA §22a-174-19b(f)(3)]
  - (C) A current valid purchase contract, tariff sheet, or transportation contract which demonstrates the maximum total sulfur content of the natural gas burned in the combustion turbine and duct burner. [Permit No. 178-0129]
- iii. The Permittee shall keep records, when the turbine/duct burner is changed for routine maintenance to include the following: [Permit No. 178-0129]
  - (A) The date the turbine/duct burner was changed;

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- (B) The reason for the change;
  - (C) Documentation that the replacement turbine/duct burner is the same make and model number;
  - (D) Documentation of all associated fixed capital costs; and
  - (E) Documentation showing that the replacement turbine/duct burner does not result in an increase in emissions, the emission of any new air pollutant or increases in electrical output of the turbine.
- v. The Permittee shall keep records required by this Title V permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 178-0129]

#### *d. Reporting Requirements*

The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine, duct burner, the air pollution control equipment or the continuous monitoring system. The Permittee shall submit such notification within 10 days of the malfunction. The notification shall include the following: [Permit No. 178-0129]

- i. a description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction; and
- ii. a description of all corrective actions and preventive measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.

## **2. PM<sub>10</sub>/PM<sub>2.5</sub>, SO<sub>2</sub>/Sulfur, VOC and Pb**

### *a. Limitation or Restriction*

- i. Allowable Emission Limits for PM<sub>10</sub>/PM<sub>2.5</sub> (from turbine manufacturer) [Permit No. 178-0129]
  - (A) Natural gas: combustion turbines: 0.021 lb/MMBtu, 2.61 lb/hr
  - (B) ULSD fuel oil: combustion turbines: 0.039 lb/MMBtu, 4.42 lb/hr
  - (C) Turbine and duct burner operating on natural gas: 0.028 lb/MMBtu, 2.87 lb/hr
  - (D) Turbine operating on ULSD fuel oil and duct burner operating on natural gas: 0.046 lb/MMBtu, 4.68 lb/hr
  - (E) Annual Emission Limit: 13.5 TPY
- ii. Allowable Emissions for SO<sub>2</sub> (AP-42) [Permit No. 178-0129]
  - (A) Natural gas: combustion turbines: 6.58E-04 lb/MMBtu, 0.08 lb/hr
  - (B) ULSD fuel oil: combustion turbines: 1.52E-03 lb/MMBtu, 0.17 lb/hr
  - (C) Turbine and duct burner operating on natural gas: 1.25E-03 lb/MMBtu, 0.10 lb/hr

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- (D) Turbine operating on ULSD fuel oil and duct burner operating on natural gas: 2.10E-03 lb/MMBtu, 0.19 lb/hr
  - (E) Annual Emission Limit: 0.5 TPY
  - (F) The Permittee must either: not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO<sub>2</sub> in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output; or not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. [40 CFR Part 60 Subpart KKKK]
- iii. Allowable Emission Limits for VOC (from turbine manufacturer) [Permit No. 178-0129]
- (A) Natural gas: combustion turbine: 7.77E-03 lb/MMBtu, 0.97 lb/hr
  - (B) ULSD fuel oil: combustion turbines: 0.039 lb/MMBtu, 4.37 lb/hr
  - (C) Turbine and duct burner operating on natural gas: 1.32E-02 lb/MMBtu, 1.15 lb/hr
  - (D) Turbine operating on ULSD fuel oil and duct burner operating on natural gas: 0.044 lb/MMBtu, 4.55 lb/hr
  - (E) Annual Emission Limit: 7.0 TPY
- iv. Allowable Emission Limits for Pb (AP-42) [Permit No. 178-0129]
- (A) ULSD fuel oil: combustion turbine: 1.40E-05 lb/MMBtu, 1.59E-03 lb/hr
  - (B) Turbine and duct burner operating on natural gas: 4.90E-07 lb/MMBtu, 1.70E-05 lb/hr
  - (C) Turbine operating on ULSD fuel oil and duct burner operating on natural gas: 1.45E-05 lb/MMBtu, 1.61E-03 lb/hr

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

- i. The Permittee may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. The Permittee must use one of the following sources of information to make the required demonstration: [40 CFR §60.4365]
  - (A) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) or less, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 scf, has potential sulfur emissions of less than 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input; or
  - (B) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR Part 75 is required.

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- ii. The Permittee shall demonstrate compliance with the emission limits in Section III.F.2.a of this Title V permit by calculating the emission rates using emission factors from the Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Section 3.1, April 2000, or most recent revision, and equipment manufacturer data (turbine) and Section 1.4, July 1998, or most recent revision, and equipment manufacturer data (duct burner). [Permit No. 178-0129]

#### *c. Record Keeping Requirements*

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and VOC emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current's month emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 178-0129]
- ii. The Permittee shall keep records required by this Title V permit for a period of no less than five years and shall submit such records the commissioner upon request. [Permit No. 178-0129]

#### *d. Reporting Requirements*

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

### **3. NOx and Ammonia**

#### *a. Limitation or Restriction*

- i. Allowable Emission Limits for NOx (from turbine manufacturer) [Permit No. 178-0129]
  - (A) Natural gas: combustion turbine: 2.5 ppmvd @ 15% O<sub>2</sub>, 0.011 lb/MMBtu, 1.37 lb/hr
  - (B) ULSD fuel oil: combustion turbine: 9.6 ppmvd @ 15% O<sub>2</sub>, 0.042 lb/MMBtu, 4.78 lb/hr
  - (C) Turbine and duct burner operating on natural gas:  
2.5 ppmvd @ 15% O<sub>2</sub>, 0.021 lb/MMBtu, 1.73 lb/hr
  - (D) Turbine operating on ULSD fuel oil and duct burner operating on natural gas:  
9.6 ppmvd @ 15% O<sub>2</sub>, 0.052 lb/MMBtu, 5.14 lb/hr
  - (E) Annual Emission Limit: 9.5 TPY
- ii. Allowable Emission Limits for Ammonia: 5.0 ppmvd @ 15% O<sub>2</sub> [Permit No. 178-0129]

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

- i. The Permittee shall demonstrate compliance with the emission limits in Section III.F.3.a of this Title V permit by calculating the emission rates using stack test data. [Permit No. 178-0129]
- ii. The Permittee shall conduct annual stack testing to demonstrate compliance with the NOx emission limits in accordance with 40 CFR §60.4400. If the NOx emissions results from the performance test is less than or equal to 75% of the NOx emission limits of 25 ppmvd @ 15% O<sub>2</sub> when firing natural gas or 74 ppmvd @ 15% O<sub>2</sub> when firing No. 2 fuel oil (Table 1 of 40 CFR Part 60 Subpart KKKK),

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the frequency of subsequent performance tests may be reduced to once every two years and as allowed by 40 CFR §60.4340 (14 (annual)/26 (biennial) months since last test).  
[40 CFR §60.4400; Permit No. 178-0129]

- iii. Recurrent stack testing for NO<sub>x</sub> and Ammonia shall be conducted within five years from the previous stack test to demonstrate compliance with the limits in Section III.F.3.a of this Title V permit.  
[Permit No. 178-0129]
- iv. The maximum rated capacity of the turbine may be corrected for the ambient temperature at the time of the stack testing using the following equations: [Permit No. 178-0129]  
  
(A) Natural Gas (MMBtu/hr):  $-6.00145E-04 * T^2 - 2.17845E-01 * T + 126.99$   
(B) No. 2 Fuel Oil (ULSD):  $-4.46663E-04 * T^2 - 2.81833E-01 * T + 125.003$   
Where T is in degree Fahrenheit (°F).
- v. The Permittee shall continuously monitor the SCR aqueous ammonia injection rate (lb/hr), operating temperature (°F) and pressure drop (inches of water) across the catalyst bed. The Permittee shall maintain these parameters within the ranges recommended by the manufacturer to achieve compliance with all the emission limits in Section III.F.3.a of this Title V permit.  
[Permit No. 178-0129]
- vi. The Permittee shall inspect the SCR once per year, at a minimum, or more frequently if recommended by manufacturer. [Permit No. 178-0129]

#### *c. Record Keeping Requirements*

- i. The Permittee shall calculate and record the monthly and consecutive 12 month NO<sub>x</sub> emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current's month emissions to that of the previous 11 months. Such records shall include a sample calculation for such pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 178-0129]
- ii. The Permittee shall continuously record the SCR aqueous ammonia injection rate (lb/hr), operating temperature (°F) and pressure drop (inches of water) across the catalyst bed. The Permittee shall maintain these parameters within ranges recommended by the manufacturer to achieve compliance with all the emission limits in Section III.F.3.a of this Title V permit. [Permit No. 178-0129]
- iii. The Permittee shall keep records of the inspection and maintenance of the SCR. The records shall include the name of the person, the date, the results or actions and the date the catalyst is replaced.  
[Permit No. 178-0129]
- iv. The Permittee shall keep records required by this Title V permit for a period of no less than five years and shall submit such records the commissioner upon request. [Permit No. 178-0129]

#### *d. Reporting Requirements*

- i. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbine, duct burner, the air pollution control equipment or the continuous monitoring system. The Permittee shall submit such notification within 10 days of the malfunction. The notification shall include the following: [Permit No. 178-0129]

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- (A) a description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction and,
  - (B) a description of all corrective actions and preventive measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.
- ii. For each affected unit that performs annual performance test in accordance with 40 CFR §63.4340(a), the Permittee must submit a written report of the results of each performance test to EPA before the close of business on the 60<sup>th</sup> day following the completion of the performance test. [40 CFR §60.4375(b)]

#### 4. CO

##### a. Limitation or Restriction

- i. Allowable Emission Limits for CO (from turbine manufacturer) [Permit No. 178-0129]
- (A) Natural gas: combustion turbine: 7.5 ppmvd @ 15% O<sub>2</sub>, 0.02 lb/MMBtu, 2.50 lb/hr
  - (B) ULSD fuel oil: combustion turbine: 7.5 ppmvd @ 15% O<sub>2</sub>, 0.02 lb/MMBtu, 2.26 lb/hr
  - (C) Turbine and duct burner operating on natural gas:  
7.5 ppmvd @ 15% O<sub>2</sub>, 0.032 lb/MMBtu, 2.93 lb/hr
  - (D) Turbine operating on ULSD fuel oil and duct burner operating on natural gas:  
7.5 ppmvd @ 15% O<sub>2</sub>, 0.032 lb/MMBtu, 2.68 lb/hr
  - (E) Annual Emission Limit: 13.0 TPY

##### b. Monitoring and Testing Requirements

- i. The Permittee shall demonstrate compliance with the emission limits in Section III.F.4.a of this Title V permit by calculating the emission rates using stack test data. [Permit No. 178-0129]
- ii. The Permittee shall continuously monitor the oxidation catalyst inlet temperature (°F). The Permittee shall maintain this parameter within the range recommended by the manufacturer to achieve compliance with all the emission limits in Section III.F.4.a of this Title V permit. [Permit No. 178-0129]
- iii. The Permittee shall inspect the oxidation catalyst once per year, at a minimum, or more frequently if recommended by manufacturer. [Permit No. 178-0129]
- iv. Recurrent stack testing for CO shall be conducted within five years from the date of the previous stack test to demonstrate compliance with the limits in Section III.F.4.a of this Title V permit. [Permit No. 178-0129]
- v. The maximum rated capacity of the turbine may be corrected for the ambient temperature at the time of stack testing using the following equations: [Permit No. 178-0129]
  - (A) Natural Gas (MMBtu/hr) =  $-6.00145E-04 * T^2 - 2.17845E-01 * T + 126.99$
  - (B) No. 2 Fuel Oil (ULSD) =  $-4.46663E-04 * T^2 - 2.81833E-01 * T + 125.003$

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Where T is in degree Fahrenheit (°F).

#### *c. Record Keeping Requirements*

- i. The Permittee shall continuously record the oxidation catalyst inlet temperature (°F). The Permittee shall maintain this parameter within the range recommended by the manufacturer to achieve compliance with all the emission limits in Section III.F.4.a of this Title V permit. [Permit No. 178-0129]
- ii. The Permittee shall keep records of the inspection and maintenance of the oxidation catalysts. The records shall include the name of the person, the date, the results or actions and the date the catalyst is replaced. [Permit No. 178-0129]
- iii. The Permittee shall calculate and record the monthly and consecutive 12 month CO emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current's month emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 178-0129]
- iv. The Permittee shall keep records required by this Title V permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 178-0129]

#### *d. Reporting Requirements*

The Permittee shall notify the commissioner in writing of any malfunction of the air pollution control equipment. The Permittee shall submit such notification within 10 days of the malfunction. The notification shall include the following: [Permit No. 178-0129]

- i. A description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction; and
- ii. A description of a corrective action preventive measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.

### **5. Startup and Shutdown**

#### *a. Limitation or Restriction*

- i. The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints. [Permit No. 178-0129]
  - (A) Start the ammonia injection as soon as minimum catalyst temperature is reached.
  - (C) The oxidation catalyst shall not be bypassed during startup or shutdown.
  - (D) The duration of startup shall not exceed 60 minutes for a hot start or a warm start, nor 240 minutes for a cold start.
  - (E) A hot start shall be defined as startup when the turbine has been down for less than 8 hours.
  - (F) A warm start shall be defined as startup when the turbine has been down for more than 8 hours.



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- (G) A cold start shall be defined as startup when the turbine has been down for more than 24 hours.
- (G) The duration of shutdown shall not exceed 60 minutes.
- ii. Emissions during these periods shall be counted towards the annual emission limits in Sections III.F.3.a.i.(E) and Section III.F.4.a.i.(E) of this Title V permit. [Permit No. 178-0129]
- iii. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specification and written recommendations. The Permittee shall operate and maintain this stationary combustion turbine, duct burner, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [40 CFR §60.4333(a); Permit No. 178-0129]

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

- i. Permittee shall demonstrate compliance with the annual emission limits in Sections III.F.3.a.i.(E) and III.F.4.a.i.(E) of this Title V permit by calculating the emission rates using the following emission factors for cold, hot and warm startup and shutdown: [Permit No. 178-0129]
  - (A) NO<sub>x</sub> – Natural Gas
    - (1) Startup: 6.22 lbs/event
    - (2) Shutdown: 0.50 lbs/event
  - (B) NO<sub>x</sub> – ULSD
    - (1) Startup: 5.44 lbs/event
    - (2) Shutdown: 1.11 lbs/event
  - (C) CO – Natural Gas
    - (1) Startup: 13.75 lbs/event
    - (2) Shutdown: 1.61 lbs/event
  - (D) CO – ULSD
    - (1) Startup: 26.31 lbs/event
    - (2) Shutdown: 0.87 lbs/event

#### *c. Record Keeping Requirements*

The Permittee shall keep records of the occurrence and duration of any startup, shutdown or malfunction in the operation of the stationary gas turbine, duct burner or any malfunction of the air pollution control equipment. [Permit No. 178-0129; 40 CFR §60.7(b)]

#### *d. Reporting Requirements*

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

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#### 6. Opacity

##### a. Limitation or Restriction

- i. Opacity shall not exceed 10% during any six minute block average as measured by 40 CFR Part 60, Appendix A, reference Method 9. [Permit No. 178-0129]
- ii. Opacity shall not exceed 40% opacity as measured by 40 CFR 60, Appendix A, reference Method 9, reduced to a one-minute block average. [RCSA §22a-174-18(b)(1)(B)]

##### b. Monitoring and Testing Requirements

Record keeping specified in Section III.F.6.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

##### c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.F.6.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

##### d. Reporting Requirements

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

#### 7. Premises Wide Cap for NOx

##### a. Limitation or Restriction

NOx emissions for the premises shall not equal or exceed 25 tons over any consecutive 12 month period. [Permit No. 178-0129]

##### b. Monitoring and Testing Requirements

- ii. The Permittee shall monitor fuel consumption for each fuel burning emissions unit at the premises, excluding mobile sources as defined in RCSA §22a-174-1 and insignificant sources listed in RCSA §22a-174-33, under one of the following options: [Permit No. 178-0129]
  - (A) Fuel Meter:
    - (1) Using an individual non-resettable fuel meter; or
    - (2) Using a fuel meter that measures fuel supplied to a group of emissions units.
  - (B) Hourly Meter:
    - (1) Using an individual hourly meter; or
    - (2) Using an hourly meter for a group of emissions units.
  - (C) In the absence of fuel or hourly meters, rental units may use purchase records or invoices.

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#### *c. Record Keeping Requirements*

- i. The Permittee shall make and keep a current record of all fuel burning equipment at the premises, excluding mobile sources as defined in RCSA §22a-174-1 and insignificant sources listed in RCSA §22a-174-33. The record shall include both permanent and temporary emissions units, as defined in RCSA §22a-174-22e, at the premises. The record shall include, at a minimum, the following information for each fuel burning emissions unit: [Permit No. 178-0129]
  - (A) A description; including: make, model, location, and Emissions Unit (EU) Number or other identification number;
  - (B) The maximum rated capacity;
  - (C) Identification of the fuel(s) used;
  - (D) Monitoring method in accordance with Section III.F.7.b of this Title V permit as well as the basis, i.e. New Source Review, Federal/State Regulation or Order number, where applicable;
  - (E) Emission factor for NO<sub>x</sub> and source of such factor; and
  - (F) The construction or placement date of temporary units and removal date, as applicable.
- ii. For each emissions unit, or group of emissions units identified in Section III.F.7.c.i of this Title V permit as using a fuel meter to monitor fuel consumption: The Permittee shall make and keep records of monthly and consecutive 12 month fuel consumption (for each fuel, if applicable). The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 178-0129]
- iii. For each emissions unit, or group of emissions units identified in Section III.F.7.c.i of this Title V permit as using an hourly meter to monitor hours of operation: The Permittee shall make and keep records of monthly and consecutive 12 month hours of operation. The consecutive 12 month hours of operation shall be determined by adding the current month's hours of operation to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 178-0129]
- iv. For each emissions unit, or group of emissions units identified in Section III.F.7.c.i of this Title V permit as using purchase records or invoices: The Permittee shall make and keep records of monthly and consecutive 12 month fuel consumption. The Permittee shall make and keep records of monthly and consecutive 12 month fuel consumption (for each fuel, if applicable). The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 178-0129]
- v. The Permittee shall calculate and record the monthly and consecutive 12 month NO<sub>x</sub> emissions for the premises. The consecutive 12 month NO<sub>x</sub> emissions shall be determined by adding the current month's NO<sub>x</sub> emissions to that of the previous 11 months for the premises. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit No. 178-0129]
- vi. The Permittee shall keep records of all purchase orders, invoices, emissions calculations methodology or other documents necessary to verify the records required by Section III.F.7 of this Title V permit.

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[Permit No. 178-0129]

vii. The Permittee shall keep all records required by this Title V permit for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit No. 178-0129]

#### *d. Reporting Requirements*

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

### 8. NO<sub>x</sub> – RCSA §22a-174-22f

#### **Classification:**

- The combined cycle combustion turbine is located at a facility that is not a major stationary source of NO<sub>x</sub>,
- The turbine/supplemental burner is gas fired and has a maximum rated capacity greater than 16 MMBtu/hr,
- The turbine is oil fired and has a maximum rated capacity greater than 6 MMBtu/hr, and
- The turbine is located in a severe non-attainment area for ozone.

#### *a. Limitation or Restriction*

If the Permittee exceeds a NO<sub>x</sub> emission threshold in RCSA §22a-174-22f(e)(2), the notification required by Section III.F.8.d.1 of this Title V permit shall be submitted within 60 days of the day on which the threshold is first exceeded and shall operate the emissions unit in compliance with RCSA §22a-174-22e no later than 270 days after the day on which the threshold is first exceeded. [RCSA §22a-174-22f(e)(3)]

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

Record keeping specified in Section III.F.8.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### *c. Record Keeping Requirements*

- i. The Permittee shall make and keep the following records:  
[RCSA §22a-174-22f(g)(2)(A) through (F)]
  - (A) During the period from May 1 to September 30, inclusive, records sufficient to determine the NO<sub>x</sub> emissions (lb) per day;
  - (B) A calculation of NO<sub>x</sub> emissions on each day of operation, performed no later than the last day of each month for everyday of operation in the preceding month;
  - (C) The method used to calculate daily NO<sub>x</sub> emissions and the information used to determine the NO<sub>x</sub> emissions rate chosen from the options in RCSA §22a-174-22f(g)(2)(C)(i) through (v);
  - (D) The date and work performed for repairs, replacement of parts and other maintenance;
  - (E) For each emissions unit for each tune-up conducted pursuant to RCSA §22a-174-22f(f), the date on which the emissions unit is tuned-up; the name, title and affiliation of the person performing the tune-up, and a description of work performed; and

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- (F) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22f.
- ii. The Permittee shall retain all records and reports produced pursuant to RCSA §22a-174-22f 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 premises where the emissions unit is located. [RCSA §22a-174-22f(g)(1)]

#### d. Reporting Requirements

- i. If an emissions unit exceeds the daily NO<sub>x</sub> threshold in Section III.F.8.a of this Title V permit, the Permittee shall submit a notification to the compliance Analysis and Coordination Unit, Bureau of Air Management at the Department. Such a notification shall be submitted no later than 60 days after the date on which daily NO<sub>x</sub> emissions thresholds were exceeded and shall include the information in RCSA §22a-174-22f(h). [RCSA §22a-174-22f(h)]
- ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

### G. GROUPED EMISSIONS UNIT 3 (GEU-3) - Cold cleaners not subject to RCSA §22a-174-3a but subject to RCSA §22a-174-20(l)(3)

#### 1. Vapor Pressure

##### a. Limitation or Restriction

- i. The Permittee of a cold cleaning unit with an internal volume greater than one liter and using solvents containing greater than 5% VOCs by weight shall meet the following requirements: [RCSA §22a-174-20(l)(3)(A) through (L)]
  - (A) Equip the cleaning device with a cover that is easily operated by hand.
  - (B) Equip the cleaning device with an internal rack or equipment for draining cleaned parts so that parts are enclosed under the cover while draining. Such draining rack or equipment may be external for applications where an internal type cannot fit into the cleaning system.
  - (C) Collect and store waste solvent in closed containers. Closed containers used for storing waste solvent may contain a device that allows pressure relief but does not allow liquid solvent to drain from container.
  - (D) Close the cover if parts not being handled in the cleaner for two minutes or more, or if the device is not in use.
  - (E) Drain the cleaned parts for at least 15 seconds or until dripping ceases, whichever is longer.
  - (F) If a degreasing solvent spray is used:
    - (1) Supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray)

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- (2) Maintain a solvent spray pressure that does not exceed 10 pounds per square inch as measured at the pump outlet, and
- (3) Perform spraying within the confines of the cold cleaning unit.
- (G) 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, at the same elevation as the tank lip.
- (H) Do not operate the unit upon occurrence of any visible solvent leak until such leak is repaired. Any leaked solvent or solvent spilled during transfer shall be cleaned immediately, and the wipe rags or other sorbent material used to clean the spilled or leaked solvent shall be immediately stored in covered containers for disposal or recycling.
- (I) Provide a permanent, conspicuous label on or posted near each unit summarizing the applicable operating requirements.
- (J) Use only solvent that has a vapor pressure less than or equal to 1.0 mmHg at 20 degrees Celsius.

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

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

#### *c. Record Keeping Requirements*

- i. The Permittee shall make and keep the following records for a minimum of five years; commencing on the date such records were created [RCSA §22a-174-20(1)(3)(J)]:
  - (A) Type of solvent used, including a description of the solvent and the solvent name;
  - (B) The vapor pressure of the solvent in mmHg measured at 20 °C (68 °F);
  - (C) The percent VOC content by weight; and
  - (D) The amount of solvent added to each unit on a monthly basis.
- ii. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

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

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#### H. GROUPED EMISSIONS UNIT 4 (GEU-4) - Booths operating under Permit Nos. 178-0035, 178-0078 and 178-0128; and subject to RCSA §22a-174-20(s) and 40 CFR Part 63 Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework facilities

EU-17: Dyescan Surface Coating Operations (Permit No. 178-0128)

EU-18: Blade Shop No. 1 Painting Operation (Permit No. 178-0078)

EU-19: Small parts paint spray booth (Permit No. 178-0035)

EU-20: Finishes Cell No. 1 (Permit No. 178-0035)

EU-21: Finishes Cell No. 2 (Permit No. 178-0035)

EU-22: Finishes Cell No. 3 (Permit No. 178-0035)

#### 1. Operational Conditions, VOC and PM

##### a. Limitation or Restriction

- i. The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.
  - (1) EU-19 through EU-22, combined: [Permit No. 178-0035]  
PM: 1,000 lb/month and 5 TPY  
VOC: 5,000 lb/month and 24.9 TPY
  - (2) EU-18: [Permit No. 178-0078]  
PM: 10 lb/month and 0.03 TPY  
VOC: 1,400 lb/month and 6.07 TPY
  - (3) EU-17: [Permit No. 178-0128]  
PM: 40 lb/month and 0.10 TPY  
VOC: 5,000 lb/month and 14.9 TPY
- ii. Demonstration of compliance with VOC and PM emission limits in Section III.H.1.a.i.(1) of this Title V permit shall be met by calculating the emission rates using emission factors from the following sources: [Permit Nos. 178-0035]  
  
VOC: emissions shall be calculated by material balance using information from the MSDS.  
  
PM: emissions shall be calculated by material balance using information from the MSDS, a 65% transfer efficiency and a minimum of 90% control efficiency from the water wash system.
- iii. Demonstration of compliance with VOC and PM emission limits in Section III.H.1.a.i.(2) and (3) of this Title V permit shall be met by calculating the emission rates using emission factors from the following sources: [Permit Nos. 178-0078 and 178-0128]  
  
VOC: emissions shall be calculated by material balance using information from the MSDS.  
  
PM: emissions shall be calculated by material balance using information from the MSDS, a 65% transfer efficiency and a minimum of 99% control efficiency from the three stage panel exhaust filter.

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- iv. EU-17, EU-18 and EU-19 through EU-22: The Permittee shall comply with the applicable requirements of RCSA §§22a-174-20(s)(3), (s)(7) and VOC content limits in Tables 20(s) and 6b. [Permit Nos. 178-0078, 178-0035 and 178-0128]
- v. The Permittee shall comply with the VOC and organic HAP content limit for primers, topcoats and specialty coatings in accordance with an using the method specified in 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facility. [Permit Nos. 178-0035, 178-0078 and 178-0128]
- vi. The Permittee may use, in the aggregate, in any 12 consecutive months no more than 55 gallons of miscellaneous metal or plastic parts coating or coatings that exceed the VOC content limits or emission limits of RCSA §22a-174-20(s). The 55 gallons of miscellaneous metal or plastic parts coatings are for all coating operations at the premises combined. [Permit Nos. 178-0035, 178-0078 and 178-0128]
- vii. The Permittee shall use HVLP spray guns, or application methods allowed in RCSA §22a-174-20(s)(4) and 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities. [Permit Nos. 178-0035, 178-0078 and 178-0128]
- viii. The Permittee shall clean the spray equipment using methods allowed in RCSA §22a-174-20(jj) and 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities. [Permit Nos. 178-0035, 178-0078 and 178-0128]

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

- i. EU-17 and EU-18: The Permittee shall demonstrate compliance with the VOC content limits in Tables 20(s)-6a and 6b by using the methods specified in RCSA §22a-174-20(s)(9). [Permit Nos. 178-0035, 178-0078 and 178-0128]
- ii. The Permittee shall comply with all written recommendations set forth by the manufacturer(s) for maintaining and operating the spray gun, spray booth, and water wash system in order to achieve their guaranteed transfer and capture efficiencies. [Permit Nos. 178-0035, 178-0078 and 178-0128]
- iii. The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants. [Permit Nos. 178-0035, 178-0078 and 178-0128]

#### *c. Record Keeping Requirements*

- i. The Permittee shall maintain records of information sufficient to determine compliance with the applicable requirements of RCSA §22a-174-20(s), including at a minimum, the following information for each calendar month: [Permit Nos. 178-0035, 178-0078 and 178-0128]
  - (A) Name and description of each coating and cleaning solvent;
  - (B) VOC content of each coating and diluent, as applied, and the associated calculations;
  - (C) VOC content of each coating or cleaning solvent, as supplied;
  - (D) The amount of each coating and cleaning solvent; purchased or used;
  - (E) A MSDS sheet, Environmental Data Sheet, Certified Product Data Sheet, or an equivalent Data Sheet for each coating and cleaning solvent;



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- (F) Documentation of control device efficiency and capture efficiency, using an applicable EPA reference method or alternate method as approved by the commissioner and the administrator; and
- (G) Date and type of maintenance performed on air pollution control equipment.
- ii. The Permittee shall calculate and record the monthly and consecutive 12 month VOC and PM emissions in units of tons. The consecutive 12 month VOC and PM emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.  
[Permit Nos. 178-0035, 178-0078 and 178-0128]
- iii. The Permittee shall keep records of use of non-compliant coatings to show compliance with the limits in Section III.H.1.a.v of this Title V permit. [Permit Nos. 178-0035, 178-0078 and 178-0128]
- iv. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [Permit Nos. 178-0035, 178-0078 and 178-0128]
- d. *Reporting Requirements*

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

#### **2. 40 CFR Part 63 Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities**

The Permittee shall comply with the requirements of Section III.K of this Title V permit.

#### **3. RCSA §22a-174-20(s) – Control of Organic Compound Emissions**

The Permittee shall comply with the requirements of Section III.J of this Title V permit.

#### **I. EMISSIONS UNIT 23 (EU-23) - Paint Spray Booth VH Parts No. 4 operates under RCSA §§22a-174-3b(g) and 22a-174-20(s), subject to 40 CFR Part 63 Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities.**

##### **1. Operational Conditions**

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

- i. The VOC content of any coating used shall not exceed 6.3 pounds per gallon, as applied.  
[RCSA §22a-174-3b(g)(1)(A)]
- ii. The hazardous air pollutant content of any coating used shall not exceed 6.3 pounds per gallon, as applied. [RCSA §22a-174-3b(g)(1)(B)]
- iii. Coating and solvent usage, including diluents and cleanup solvents but excluding water, shall not, in any 12 month rolling aggregate, exceed 3,000 gallons. [RCSA §22a-174-3b(g)(1)(C)]

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

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

Record keeping specified in Section III.I.1.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

#### *c. Record Keeping Requirements*

i. The Permittee shall make and maintain records of the following information:

[RCSA §22a-174-3b(g)(3)]

(A) Records of the type and quantity of coating and solvent used, in gallons, for each month and each 12 month rolling aggregate; and

(B) Records of the hazardous air pollutant and VOC content per gallon of each coating and solvent used, as applied.

ii. The Permittee shall make the records available to the commissioner to inspect and copy upon request.

[RCSA §22a-174-3b(g)(2)(A)]

iii. The Permittee shall maintain records for five years from the date such record is created.

[RCSA §22a-174-3b(g)(2)(B)]

#### *d. Reporting Requirements*

The Permittee shall provide records, or a copy thereof, to the commissioner upon request and shall make such records available to the commissioner to inspect at the location maintained.

[RCSA §22a-174-3b(i)]

#### **4. 40 CFR Part 63 Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities**

The Permittee shall comply with the requirements of Section III.K of this Title V permit.

#### **3. RCSA §22a-174-20(s) – Control of Organic Compound Emissions**

The Permittee shall comply with the requirements of Section III.J of this Title V permit.

**J. RCSA §22a-174-20(s): Miscellaneous Metal and Plastic Parts Coatings** - The following Emissions Units are subject to RCSA §22a-174-20(s):

EU-11: Special Prime Paint Booth

EU-12: Paint Spray Booth Blade Prime (Bond) – Pumpless water wash system

EU-17: Dyescan Booth – (Permit No. 178-0128)

EU-18: Blades Spray Booth – (Permit No. 178-0078)

EU-19: Small Parts Paint spray Booth – (Permit No. 178-0035)

EU-20: Paint Spray Booth Finishes Cell No. 1 – (Permit No. 178-0035)

EU-21: Paint Spray Booth Finishes Cell No. 2 – (Permit No. 178-0035)

EU-22: Paint Spray Booth Finishes Cell No. 3 – (Permit No. 178-0035)

EU-23: Paint Spray Booth VH Parts No. 4 – (RCSA §22a-174-3b)

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

#### **1. VOC**

##### *a. Limitation or Restrictions*

- i. Unless add-on air pollution control equipment is used, and except as provided in RCSA §22a-174-20(s)(7), the Permittee shall use only coatings that have as an applied VOC content no greater than the applicable levels in RCSA §22a-174-20, Table 20(s)-6a or 20(s)-6b. The Aerospace Specialty Coatings VOC content limits are inclusive of exemptions and exceptions in RCSA §22a-174-20(s)(7). [RCSA §22a-174-20(s)(3)]
- ii. The Permittee shall use the following work practices: [RCSA §22a-174-20(s)(5)]
  - (A) New and used VOC-containing coating, diluent or cleaning solvent, including a coating mixed on the premises, shall be stored in a non-absorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use. [RCSA §22a-174-20(s)(5)(A)]
  - (B) Spills and leaks of VOC-containing, diluent or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating; diluent or cleaning solvent shall be absorbed and removed immediately. [RCSA §22a-174-20(s)(5)(B)]
  - (C) Absorbent applicators, such as cloth and paper, which are moistened with a VOC-containing coating or solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling. [RCSA §22a-174-20(s)(5)(C)]
  - (D) VOC-containing coating, diluent and cleaning solvent shall be conveyed from one location to another in a closed container or pipe. [RCSA §22a-174-20(s)(5)(D)]

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

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

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

- i. The Permittee operating pursuant to an exemption or exception set out in RCSA §22a-174-20(s)(7) shall maintain records sufficient to verify the applicability of the exemption or exception. [RCSA §22a-174-20(s)(7)]
- ii. The Permittee shall maintain records of information sufficient to determine compliance with the applicable requirements, including at a minimum, the following information for each calendar month: [RCSA §22a-174-20(s)(8)(A)]
  - (A) Name and description of each coating and cleaning solvent;
  - (B) VOC content of each coating and diluent, as applied, and the associated calculations;
  - (C) VOC content of each coating or cleaning solvent, as supplied;
  - (D) The amount of each coating and cleaning solvent; purchased or used;

### Section III: Applicable Requirements and Compliance Demonstration

- (E) A Material Safety Data Sheet, Environmental Data Sheet, certified Product Data Sheet, or an equivalent data sheet for each coating and cleaning solvent;
  - (F) Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the commissioner and the Administrator; and
  - (G) Date and type of maintenance performed on air pollution control equipment, if applicable.
- iii. All records shall be made available to the commissioner to inspect and copy upon request, and maintained for five years from the date such record is created. [RCSA §22a-174-20(s)(8)(B)]

#### d. Reporting Requirements

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

### K. 40 CFR Part 63 Subpart GG: National Emission Standards for Aerospace Manufacturing and Rework Facilities (as amended on November 19, 2015) - The following Emissions Units are subject to 40 CFR Part 63 Subpart GG:

- EU-11: Special Prime Paint Booth
- EU-12: Paint Spray Booth Blade Prime (Bond)
- EU-17: Dyescan Booth – (Permit No. 178-0128)
- EU-18: Blades Spray Booth – (Permit No. 178-0078)
- EU-19: Small Parts Paint Spray Booth – (Permit No. 178-0035)
- EU-20: Paint Spray Booth Finishes Cell No. 1 – (Permit No. 178-0035)
- EU-21: Paint Spray Booth Finishes Cell No. 2 – (Permit No. 178-0035)
- EU-22: Paint Spray Booth Finishes Cell No. 3 – (Permit No. 178-0035)
- EU-23: Paint Spray Booth VH Parts No. 4 – (RCSA §22a-174-3b)

Note: Non-HAP materials are excluded per 40 CFR §63.741(f)

#### 1. Organic HAP and VOC

##### a. Limitation or Restrictions

- i. The Permittee shall comply with the organic HAP and VOC content limits specified below for those coatings that are uncontrolled: [40 CFR §§63.745(c)(1) and (c)(6)]
  - (A) Organic HAP and VOC emissions from primers shall be limited to no more than 2.9 lb/gal (350 g/L) of primer (less water), as applied; and
  - (B) Organic HAP and VOC emissions from topcoats shall be limited to no more than 3.5 lb/gal (420 g/L) of coating (less water), as applied.
  - (C) Organic HAP and VOC emissions from specialty coatings shall be limited to no more than the limits in Table 1 of 40 CFR Part 63 Subpart GG for each coating specialty type. The Permittee of a specialty coating application operation that is existing on February 15, 2015 shall be in compliance with the requirements of 40 CFR Part 63 Subpart GG on or before December 7,

### Section III: Applicable Requirements and Compliance Demonstration

2018. [40 CFR §63.749(3)]

- ii. Compliance with the organic HAP and VOC content limits in Section III.K.1.a.i of this Title V permit shall be accomplished by either: [40 CFR §§63.745(e)(1) and (e)(2)]
  - (A) Use of primers, topcoats (including self-priming topcoats) and specialty coatings with HAP and VOC content levels equal to or less than the limits specified; or
  - (B) Use the averaging provisions described in 40 CFR §63.743(d).

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

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

#### c. *Record Keeping Requirements*

The Permittee shall record the following information:

- i. The name and VOC content as received and as applied of each primer, top coat and specialty coating used at the facility. [40 CFR §63.752(c)(1)]
- ii. The Permittee is required to comply with the organic HAP and VOC content limits in Section III.K.1.a.i.(A) through (C) of this Title V permit by recording the information specified in Section III.K.1.c.iii through v of this Title V permit, as appropriate. The Permittee using coating manufacturer's supplied data to demonstrate compliance with the applicable organic HAP or VOC limit specified in Section III.K.1.a.i of this Title V permit may retain the manufacturer's documentation and annual purchase records in place of the records specified in Section III.K.1.c.iii through v of this Title V permit. The Permittee using the coating manufacturer's supplied data to demonstrate compliance based on the HAP content of the coating, and adding non-HAP solvent to those coatings, must also maintain records of the non-HAP solvent added to the coating. [40 CFR §63.752(c)]
- iii. For uncontrolled primers, topcoats and specialty coatings that meet the organic HAP and VOC content limits in Section III.K.1.i.(A) through (C) of this Title V permit without averaging: [40 CFR §§63.752(c)(2)(i) through (iii)]
  - (A) The mass of organic HAP emitted per unit volume of coating as applied determined by the procedures specified in 40 CFR §63.750(c) and the mass of VOC emitted per unit volume of coating as applied determined by the procedures specified in 40 CFR §63.750(e) for each coating formulation within each coating category used each month.
  - (B) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of  $H_i$  and  $G_i$  from equations in 40 CFR §§63.750(c) and (e); and
  - (C) The volume (gal) of each coating formulation within each coating category used each month.
- iv. For “low HAP content” uncontrolled primers with organic HAP and VOC content less than or equal to 2.1 lb/gal (250 g/L) less water as applied and VOC content less than or equal to 2.1 lb/gal (250 g/L) less water and exempt solvents as applied: [40 CFR §§63.752(c)(3)(i) and (ii)]

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

- (A) Annual purchase records of the total volume of each primer purchased; and
  - (B) All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine  $H_i$ , if not applied as received, from equations in 40 CFR §§63.750(c) and (e).
- v. For primers, topcoats and specialty coatings complying with the organic HAP and VOC content level by averaging: [40 CFR §§63.752(c)(4)(i) and (ii)]
- (A) The monthly volume-weighted average masses of organic HAP emitted per unit volume of coating as applied determined by the procedures specified in 40 CFR §63.750(d) and of VOC emitted per unit volume of coating as applied for all coatings determined by the procedures specified in 40 CFR §63.750(f); and
  - (B) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of  $H_a$  and  $G_a$  from equations in 40 CFR §63.750(d) and (f).
- vi. The compliance demonstration for a primer or top coat may be based on the organic HAP content or the VOC content of the primer or top coat; demonstrating compliance with both the HAP content limit and the VOC content limit is not required. If a primer or topcoat contains HAPs solvents that are exempt from the definition of VOC in 40 CFR §63.741 and 40 CFR §51.100, then the HAP content must be used to demonstrate compliance. [40 CFR §63.749(d)]
- vii. The Permittee shall fulfill all record keeping requirements specified in 40 CFR §§63.10(a), (b), (d) and (f), except 40 CFR §§63.10(b)(2)(i), (iv) and (v). The Permittee must also record and maintain according to 40 CFR §63.10(b)(1) the following information:
- (A) In the event that an affected unit fails to meet the applicable standard, record the number of failures. For each failure record the date, time and duration of each failure;
  - (B) For each failure to meet the applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions; and
  - (C) Record actions taken to minimize emissions in accordance with 40 CFR §63.743(e) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- viii. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

The Permittee shall submit semiannual reports occurring every six months from the date of the notification in compliance with 40 CFR §§63.753(a)(5)(i) through (iii) and §§63.753(c)(1)(i) through (iii). [40 CFR §§63.753(a) and (c)]

## Section III: Applicable Requirements and Compliance Demonstration

### 2. Inorganic HAP Emissions

#### *a. Limitation or Restriction*

- i. The Permittee shall apply spray-applied primers, topcoats and specialty coatings using HVLP spray guns, or one or more of the application techniques specified in 40 CFR §§63.745(f)(1)(i) through (v). [40 CFR §63.745(f)(1)]
- ii. The Permittee shall ensure that the air stream from any new or existing spray-applied primer, topcoat or specialty coating application operation in which any of the coatings that are spray applied contain inorganic HAP pass through a waterwash system or dry particulate filter system that meets the filter efficiency requirements in 40 CFR §63.750. [40 CFR §63.745(g)]

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

- i. If a dry particulate filter system is used, the Permittee must install a differential pressure gauge across the filter banks and continuously monitor the pressure drop across the filter or install an interlock system that will automatically shut down the coating spray application system if the pressure drop exceeds or falls below the filter's manufacturer's recommended limit(s). [40 CFR §63.745(g)(2)(iv)]
- ii. If a conventional waterwash system is used, the Permittee must continuously monitor the water flow rate or install an interlock system that will automatically shut down the coating spray application system if the water flow rate falls below or exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures. If a pumpless system is used, continuously monitor the booth parameter(s) that indicate performance of the booth per the manufacturer's recommendations to maintain the booth within acceptable operating efficiency range or install an interlock system that will automatically shut down the coating spray application system if the booth parameters are outside the parameter range in the manufacturer's recommendations. [40 CFR §63.745(g)(2)(v)]

#### *c. Record Keeping Requirements*

- i. If a dry particulate system is used, the Permittee shall record the pressure drop across the operating system once each shift during which coating operations occur. [40 CFR §63.752(d)(1)]
- ii. If a conventional waterwash system is used, the Permittee shall record the water flow rate through the operating system once per shift during which coating operations occur. [40 CFR §63.752(d)(2)]
- iii. If a pumpless system is used, the Permittee shall record the parameter recommended by the booth manufacturer that indicates the performance of the booth once each shift during which coating occur. [40 CFR §63.752(d)(2)]
- iv. The Permittee shall include in the records of Section III.K.2.c.i through iii of this Title V permit the acceptable pressure drop, water flow rate, or for the pumpless waterwash booth, the booth manufacturer recommended parameter(s) that indicate booth performance, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures. [40 CFR §63.752(d)(3)]
- ix. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

### Section III: Applicable Requirements and Compliance Demonstration

#### d. Reporting Requirements

- i. The Permittee shall submit semiannual reports occurring every six months from the date of the notification of compliance status that identify: [40 CFR §§63.753(c)(1) and (2)]
  - (A) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, the water flow rate through a conventional waterwash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures;
  - (B) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and
  - (C) The Permittee shall submit annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop or water flow rate for each dry filter or waterwash system, as applicable, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

#### L. GROUPED EMISSIONS UNIT 5 (GEU-5) - Hand Wiping Operations subject to RCSA §22a-174-20(ii) and 40 CFR Part 63 Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities

##### Note:

- The Permittee complies with the requirements of RCSA §22a-174-20(ii) by using cleaning solvents in accordance with the requirements of 40 CFR §63.744 as specified in RCSA §22a-174-20(ii)(3)(A)(iv).
- Non-HAP materials are excluded per 40 CFR §63.741(f).

#### 1. Operational Conditions

##### a. Limitation or Restriction

The Permittee shall use cleaning solvents that meet one of the requirements specified in 40 CFR §§63.744(b)(1), (b)(2) and (b)(3). Cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in 40 CFR §63.741(f) are exempt from the requirements in 40 CFR §§63.744(b)(1), (b)(2) and (b)(3). [40 CFR §63.744(b)]

##### b. Monitoring and Testing Requirements

- i. Compliance with the hand-wipe cleaning solvent approved composition list specified in 40 CFR §63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved compositions is met. [40 CFR §63.750(a)]
- ii. The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to 40 CFR Part 63 Subpart GG shall be determined using the methods specified in 40 CFR §§63.750(b)(1) and (2). [40 CFR §63.750(b)]



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

#### *c. Record Keeping Requirements*

- i. The Permittee shall record the following information: [40 CFR §§63.752(b)(1) through (5)]
  - (A) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.
  - (B) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in 40 CFR §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations:
    - (1) The name of each cleaning solvent used;
    - (2) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and
    - (3) Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.
  - (C) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in 40 CFR §63.744(b)(1), but does comply with the vapor pressure requirement in 40 CFR §63.744(b)(2):
    - (1) The name of each cleaning solvent used;
    - (2) The composite vapor pressure of each cleaning solvent used;
    - (3) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and
    - (4) The amount (in gallons) of each cleaning solvent used each month at each operation.
  - (D) For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in 40 CFR §63.744(e) that does not conform to the vapor pressure or composition requirements of 40 CFR §63.744(b):
    - (1) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and
    - (2) A list of the processes set forth in 40 CFR §63.744(e) to which the cleaning operation applies.
- ii. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

- i. The Permittee shall submit semiannual reports occurring every six months from the date of notification of compliance status that identify the following information:  
[40 CFR §§63.753(b)(1)(i) through (v)]

### Section III: Applicable Requirements and Compliance Demonstration

- (A) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;
- (B) A list of any new cleaning solvents used for hand-wipe cleaning in the previous six months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in 40 CFR §63.744(b)(1);
- (C) Any instance where a noncompliant spray gun cleaning method is used;
- (D) Any instances where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and
- (E) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

#### **M. GROUPED EMISSIONS UNIT 6 (GEU-6) - Spray Gun Cleaning Operations subject to RCSA §22a-174-20(jj) and subject to 40 CFR Part 63 Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities**

##### Notes:

- The Permittee complies with the requirements of RCSA §22a-174-20(jj) by using spray gun cleaning methods in accordance with the requirements of 40 CFR §63.744 as specified in RCSA §22a-174-20(jj)(3)(A)(iii).
- Non-HAP materials are excluded per 40 CFR §63.741(f).

#### **1. Operational Conditions**

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

The Permittee shall use one or more of the following gun cleaning techniques, or the equivalent: [40 CFR §§63.744(c)(1) through (4)]

- i. Enclosed system: Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun. If leaks are found during the monthly inspection required in 40 CFR §63.751(a), repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15<sup>th</sup> day after detection, the cleaning solvent shall be removed, and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.
- ii. Nonatomized cleaning: clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.
- iii. Disassembled spray gun cleaning: disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

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

- iv. Atomizing cleaning: Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

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

Enclosed spray gun cleaners: The Permittee using an enclosed spray gun cleaner under 40 CFR §63.744(c)(1) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation. [40 CFR §63.751(a)]

#### *c. Record Keeping Requirements*

- i. The Permittee shall keep a record of all leaks from enclosed spray gun cleaners identified in Section III.M.1.b of this Title V permit that include for each leak found: [40 CFR §63.752(b)(5)]
  - (A) Source identification;
  - (B) Date leak was discovered; and
  - (C) Date leak was repaired.
- ii. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

- i. The Permittee shall submit semiannual reports occurring every six months from the date of the notification of compliance status that identify: [40 CFR §63.753]
  - (A) Any instance where a noncompliant spray gun cleaning method is used;
  - (B) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and
  - (C) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

**N. EMISSIONS UNIT 15 (EU-15):** Solution Tank GN276 – Nital Etch subject to Collateral Conditions in Permit Nos. 178-0035, 178-0078 and 178-0128

#### **1. VOC**

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

The Permittee shall not cause or allow the Nital Etch tank to exceed the following emission limits at any time: [Permit Nos. 178-0035, 178-0078 and 178-0128]  
VOC: 490 lb/month and 2.94 TPY

### Section III: Applicable Requirements and Compliance Demonstration

#### *b. Monitoring Requirements*

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

#### *c. Record Keeping Requirements*

- i. The Permittee shall calculate and record the monthly and consecutive 12 month VOC emissions. The consecutive 12 month VOC emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month. [Permit Nos. 178-0035, 178-0078 and 178-0178]
- ii. The Permittee shall keep all records required for a period of no less than five years and shall submit such records to the commissioner upon request. [RCSA §22a-174-33(j)(1)(K)]

#### *d. Reporting Requirements*

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

### **O. PREMISES-WIDE GENERAL REQUIREMENTS**

1. **Annual Emission Statements:** The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4(d)(1).
2. **Emergency Episode Procedures:** The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
3. **Reporting of Malfunctioning Control Equipment:** The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
4. **Prohibition of Air Pollution:** The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
5. **Public Availability of Information:** The public availability of information shall apply, as set forth in RCSA §22a-174-10.
6. **Prohibition Against Concealment/Circumvention:** The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
7. **Violations and Enforcement:** The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
8. **Variances:** The Permittee may apply to the commissioner for a variance from one or more of the provisions of these regulations as set forth in RCSA §22a-174-13.
9. **No Defense to Nuisance Claim:** The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.

### Section III: Applicable Requirements and Compliance Demonstration

10. **Severability:** The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
11. **Responsibility to Comply:** The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
12. **Particulate Emissions:** The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18.
13. **Fuel Sulfur Content:** The Permittee shall not use No. 2 heating oil that exceeds fifteen parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(B) .
14. **Sulfur Dioxide Emissions:** The Permittee shall comply with the requirements for Control of Sulfur Dioxide Emissions from Power Plants and other large stationary sources of air pollution as set forth in RCSA §22a-174-19a.
15. **Sulfur Compound Emissions:** The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §§22a-174-19, 22a-174-19a and 22a-174-19b, as applicable.
16. **Organic Compound Emissions:** The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
17. **Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22f.
18. **Ambient Air Quality:** The Permittee shall not cause or contribute to a violation of an ambient air quality standard as set forth in RCSA §22a-174-24(b).
19. **Open Burning:** The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
20. **Asbestos:** Should the premises, as defined in 40 CFR §61.145, become subject to the national emission standard for asbestos regulations in 40 CFR Part 61 Subpart M when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR §61.145(b) and shall comply with all other applicable requirements of 40 CFR Part 61 Subpart M.
21. **Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
22. **Protection of Stratospheric Ozone:** 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 F.

## Section IV: Compliance Schedule

<b>TABLE IV: 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>
		No Steps are required for achieving compliance at this time		

## Section V: State Enforceable Terms and Conditions

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

### SECTION V: STATE ENFORCEABLE TERMS AND CONDITIONS

- A.** This Title V permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Energy and Environmental Protection or any federal, local or other state agency. Nothing in this Title V permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this Title V permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- C.** Additional Emissions Units
- 1.** The Permittee shall make and submit a written record, at the commissioner's request, within 30 days of receipt of notice from the commissioner, or by such other date specified by the commissioner, of each additional emissions unit or group of similar or identical emissions units at the premises.
  - 2.** Such record of additional emissions units shall include each emissions unit, or group of emissions units, at the premises which is not listed in Section II.A of this Title V permit, unless the emissions unit, or group of emissions units, is:
    - a. an insignificant emissions unit as defined in RCSA §22a-174-33; or
    - b. an emissions unit or activity listed in *White Paper for Streamlined Development of Part 70 Permit Applications, Attachment A* (EPA guidance memorandum dated July 10, 1995).
  - 3.** For each emissions unit, or group of emissions units, on such record, the record shall include, as available:
    - a. Description, including make and model;
    - b. Year of construction/installation or if a group, range of years of construction/installation;
    - c. Maximum throughput or capacity; and
    - d. Fuel type, if applicable.
- D.** Odors: The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA §22a-174-23.
- E.** Noise: The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA §§22a-69-1 through 22a-69-7.4, inclusive.

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

- F.** Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- G.** The Permittee shall comply with the requirements for Control of Carbon Dioxide Emissions as set forth in RCSA §22a-174-31.
- H.** The Permittee shall comply with the requirements for Architectural and Industrial Maintenance Coatings as set forth in RCSA §22a-174-41.
- I.** The Permittee shall comply with the requirements for Adhesives and Sealants as set forth in RCSA §22a-174-44.



## **Section VI: Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

## **Section VI: Title V Requirements**

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

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

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

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

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

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

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

## **Section VI: Title V Requirements**

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

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

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

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

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

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

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

This Title V permit shall not be deemed to:

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

## **Section VI: Title V Requirements**

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

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

### **N. PERMIT AVAILABILITY**

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

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

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

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

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

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

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

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

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

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

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

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

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

## **Section VI: Title V Requirements**

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-60.

### **W. REVOCATION [RCSA §22a-174-2a(h)]**

The commissioner may revoke this Title V permit on his own initiative or on the request of the Permittee or any other person, in accordance with CGS §4-182(c), RCSA §22a-3a-5(d), and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The Permittee requesting revocation of this Title V permit shall state the requested date of revocation and provide evidence satisfactory to the commissioner that the subject source is no longer a Title V source.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this Title V permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this Title V permit if the Administrator has determined that the commissioner failed to act in a timely manner on a permit renewal application.

This Title V permit may be modified, revoked, reopened, reissued, or suspended by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(r), CGS §22a-174c, or RCSA §22a-3a-5(d).

## **Section VI: Title V Requirements**

### **X. REOPENING FOR CAUSE [RCSA §22a-174-33(s)]**

This Title V permit may be reopened by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(s).

### **Y. CREDIBLE EVIDENCE**

Notwithstanding any other provision of this Title V permit, for the purpose of determining compliance or establishing whether a Permittee has violated or is in violation of any permit condition, nothing in this Title V permit shall preclude the use, including the exclusive use, of any credible evidence or information.