

Connecticut Department of
**ENERGY &
 ENVIRONMENTAL
 PROTECTION**

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

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

Title V Permit Number	104-0103-TV
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Date Issued	August 7, 2018
Modification Issue Date	April 6, 2021
Expiration Date	August 7, 2023

Corporation:

Pratt & Whitney Division of Raytheon Technologies Corporation

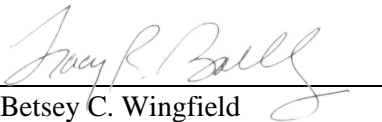
Premises Location:

1 Aircraft Road, Middletown, CT 06457

Name of Responsible Official and Title:

Patrick H. Regan, General Manager, Cold Section Module Center

All the following attached pages, 2 through 65, are hereby incorporated by reference into this Title V permit.

for 
 Betsey C. Wingfield
 Deputy Commissioner

April 6, 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>
%	Percent
ASTM	American Society of Testing and Materials
bhp	Brake horsepower
Btu	British Thermal Units
CFR	Code of Federal Regulations
cfh	Cubic Feet per Hour
CGS	Connecticut General Statutes
CO	Carbon Monoxide
DEEP	Department of Energy and Environmental Protection
DoD	Department of Defense
EU	Emissions Unit
EPA	Environmental Protection Agency
g	Gram
gal	Gallon
GEU	Grouped Emissions Unit
H ₂ SO ₄	Sulfuric Acid
HAP	Hazardous Air Pollutant
HEPA	High Efficiency Particulate Air
HHV	Higher Heating Value
HVAC	Heating, Vacuum, Air Conditioning
HVLP	High Volume Low Pressure
hr	Hour
ISO	International Organization for Standardization
kW	Kilowatt
lb	Pound
m ³	Cubic Meter
MASC	Maximum Allowable Stack Concentration
MMBtu	Million British Thermal Unit
MMCF	Million Cubic Feet
MW	Megawatt
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
No.	Number
NMHC	Non-Methane Hydrocarbon
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
O ₂	Oxygen
P	Permit
Pb	Lead
P&W	Pratt & Whitney
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 microns
PM _{2.5}	Particulate Matter less than 2.5 microns

LIST OF ABBREVIATIONS/ACRONYMS, continued

<i>Abbreviation/Acronym</i>	<i>Description</i>
ppm	Parts per Million
ppmvd	Parts per million, volumetric basis dry
R&D	Research and Development
RACT	Reasonably Available Control Technology
RCSA	Regulations of Connecticut State Agencies
scfh	Standard Cubic Feet per Hour
SCR	Selective Catalytic Reduction
SIC	Standard Industrial Classification Code
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxide
SOS	Standard Operating Scenario
TPY	Tons per year
TSP	Total Suspended Particulate
<i>ug</i>	Microgram
ULSD	Ultra Low-Sulfur Distillate
VOC	Volatile Organic Compound
yr	Year

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Uninstalled engine manufacturing, assembly and testing
Primary SIC: 3724
NAICS: 336412

Facility Mailing Address: Pratt & Whitney Division of Raytheon Technologies Corporation
Aircraft Road
Middletown, CT 06457

Telephone Number: (860) 704-7772

B. PREMISES DESCRIPTION

The Pratt & Whitney (P&W) Middletown facility engages in manufacturing processes, assembly and testing of experimental and production aircraft engines, ground based gas turbine engines and components, as well as overhaul and repair of these jet engines. Facility operations include processes such as tank lines, welding operations, thermal spray, small ovens, furnaces, washers, heating, ventilating, and air conditioning (HVAC). P&W is a major source for PM, PM₁₀, SO₂, NO_x, CO, VOC and HAP emissions. P&W is a Title V source located in a serious ozone non-attainment area defined in RCSA §22a-174-1(103).

Powerhouse

Three powerhouse boilers provide steam primarily for HVAC, manufacturing processes and experimental test operations. Two Rentech boilers (GEU-17) were issued permits to construct and operate, Permit Nos. 104-0140 and 104-0141, on 12/8/2006. Low NO_x burners and flue gas recirculation are used to control NO_x emissions. The Rentech boilers are subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60 Subpart Dc). The Cleaver Brooks D-68 boiler (EU-19) was issued a permit to construct, Permit No. 104-0036, on 1/14/1985, permit to operate on 10/17/1985, revised permit on 1/14/2008, and minor modifications on 06/06/14 and 08/15/16. All three boilers are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD). GEU-17 operates as a Gas 1 unit and EU-19 operates as a limited-use unit under 40 CFR Part 63 Subpart DDDDD.

The Caterpillar Solar Taurus 70 gas turbine (EU-18) was issued a permit to construct and operate, Permit No. 104-0142, on 12/8/2006. The turbine drives a 7.5 MW generator that provides electrical power to facility operations. The exhaust passes through a heat recovery steam generator that provides steam for HVAC, manufacturing processes and experimental test operations. Selective Catalytic Reduction (SCR) is used to control NO_x emissions. The turbine is subject to the NSPS for Stationary Combustion Turbines (40 CFR Part 60 Subpart KKKK) and the NESHAP for Stationary Combustion Turbines (40 CFR Part 63 Subpart YYYY). On August 18, 2004 EPA issued a stay for lean premix gas-fired combustion turbines that would otherwise be subject to 40 CFR Part 63 Subpart YYYY. Therefore, EU-18 was only required to submit Initial Notifications pursuant to 40 CFR §63.6145.

Section I: Premises Information/Description

Engine Testing Operations

Two non-vitiated inlet air heaters (GEU-3) are used in some test programs to preheat the inlet air of engine components test rig. Inlet air heaters 2 and 3 were issued permits to construct, Permit Nos. 104-0028 and 104-0029, on 8/24/1977, original permits to operate on 12/21/1982, revised permits on 4/10/1996, and minor modifications on 10/20/16. The two air heaters are subject to the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD) and are considered limited-use process heaters.

An FT-4 industrial drive engine/free turbine unit (EU-4) is used to drive compressors and/or exhausters to support test cell operation. The drive engine was issued a permit to construct, Permit No. 104-0027, on 8/24/1977, original permit to operate on 12/21/1982, and revised permit to operate on 4/10/1996.

The testing of GG-8 stationary gas turbines (EU-5) was issued a permit to construct, Permit No. 104-0062, on 7/7/1989, original permit to operate on 10/31/1990, and a minor modification on 9/23/2002.

The combustion test rig X-960 (EU-6) was issued a permit to construct, Permit No. 104-0030, on 8/24/1977, original permit to operate on 07/18/1980, revised permit to operate on 04/10/1996, and a minor modification on 10/21/2010.

Test Cells 1-8 (GEU-10) are used to house uninstalled aircraft engines while they are being tested. The eight Test Cells are not required to be registered or permitted. Only the Premises-Wide General Requirements apply to these units.

Pursuant to RCSA §22a-174-22e(c)(6), all of these units are considered test stands and therefore the requirements of RCSA §22a-174-22e(d), (i), (l), and (m) do not apply. The record keeping and reporting found in RCSA §22a-174-22e still apply, however there are no specific reporting requirements pursuant to RCSA §22a-174-22e(k).

Emergency Engines

Four diesel fired emergency engines (GEU-7), three Cummins, and a Kohler emergency generators, are subject to RCSA §22a-174-3b(e) and the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

Five other diesel fired emergency engines and one fire pump (GEU-8) are not required to be registered or permitted but are subject to 40 CFR 63 Subpart ZZZZ.

Two Cummins emergency engines, and one Cummins Fire Pump (GEU-9), are subject the New Source Performance Standards for Stationary Compression Ignition Engines, 40 CFR Part 60 Subpart IIII.

Paint Spray Booths

There are three ATR spray booths (EU-12, EU-13, and EU-23) that were issued permits, Permit Nos. 104-0126, 104-0139, and 104-0153 on 4/24/2001, 12/9/2004, and 11/13/2017 respectively. Dry panel filters control particulate emissions. The spray booths are subject to the NESHAP for Aerospace Manufacturing and Rework Facilities (40 CFR Part 63 Subpart GG). However, P&W does not apply any primers or topcoats subject to the Aerospace NESHAP limits as all of the coatings applied qualify either as specialty coatings, R&D coatings or DOD coatings.

Section I: Premises Information/Description

Plasma Spray Booths

There are six plasma spray booths (GEU-21) that do not require permits. The plasma spray booths incorporate high efficiency cartridge design dust collectors followed by HEPA filters for particulate matter control. Actual particulate emissions after control are insignificant. However, in the absence of permits making the controls federally enforceable, the plasma spray booths have a combined potential to emit of Title III metal HAPs that makes the facility a major source for HAPs. These plasma spray booths electrodeposit melted metals onto metal substrates. Pursuant to 40 CFR §63.741(f), electrodeposition is not covered by the Aerospace NESHAP. In addition, 40 CFR §63.744(c) standards for spray gun cleaning do not apply because the spray guns are not cleaned with solvents. All applicable requirements for GEU-21 are listed in the premises-wide general requirements of this Title V permit.

Miscellaneous Cleaning Operations

Miscellaneous cleaning operations (GEU-18) subject to 40 CFR Part 63 Subpart GG include miscellaneous hand wiping, spray gun cleaning and flush cleaning. All applicable requirements are found in Section III.J.1. of the Title V permit.

Pratt & Whitney Division of Raytheon Technologies Corporation exceeds the major source threshold for the following pollutants: PM, PM₁₀, SO₂, NO_x, CO, VOC and HAP emissions.

Section II: Emissions Units Information

A. EMISSIONS UNITS DESCRIPTION

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

TABLE II.A: EMISSIONS UNITS DESCRIPTION			
Emissions Units	Emissions Unit Description	Control Unit Description	NSR Permit, Order, or Regulation Number
GEU-3	Non-Vitiated Inlet Air Heaters 2 and 3	None	P104-0028 P104-0029 40 CFR Part 63 Subpart DDDDD RCSA §22a-174-22e
EU-4	FT-4 Gas Turbine Engine	None	P104-0027 RCSA §22a-174-22e
EU-5	GG-8 Stationary Gas Turbines	None	P104-0062 RCSA §22a-174-22e
EU-6	Combustion Test Rig X-960	None	P104-0030 RCSA §22a-174-22e
GEU-7	Four emergency engines	None	RCSA §22a-174-3b(e) 40 CFR Part 63 Subpart ZZZZ
GEU-8	Five emergency engines and one fire pump - diesel powered	None	40 CFR Part 63 Subpart ZZZZ
GEU-9	Two emergency engines and one fire pump – diesel powered	None	40 CFR Part 60 Subpart IIII 40 CFR Part 63 Subpart ZZZZ
EU-12 EU-13	ATR paint spray booth (BT 541944) ATR paint spray booth (BT 542361)	Panel Filter Panel Filter	P104-0126 P104-0139 40 CFR Part 63 Subpart GG
GEU-17	Rentech Boilers 5 & 6	Low NOx burner, Flue Gas Recirculation	P104-0140 P104-0141 40 CFR Part 60 Subpart Dc 40 CFR Part 63 Subpart DDDDD RCSA §22a-174-22e
EU-18	Solar Taurus 70 Gas Turbine	SCR	P104-0142 40 CFR Part 60 Subpart KKKK 40 CFR Part 63 Subpart YYYYY RCSA §22a-174-22e

Section II: Emissions Units Information

EU-19	Cleaver Brooks D-68 Boiler	Low NOx Burner	P104-0036 40 CFR Part 63 Subpart DDDDD RCSA §22a-174-22e
EU-23	ATR paint spray booth, (BT548439)	3-stage dry filter	P104-0153 40 CFR Part 63 Subpart GG
GEU-18	Miscellaneous Cleaning Operations	None	40 CFR Part 63 Subpart GG

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. There are no Alternate Operating Scenarios for the premises.

TABLE II.B: OPERATING SCENARIO IDENTIFICATION	
Emissions Units Associated with the Scenarios	Description of Scenarios
GEU-3	The standard operation of the two inlet air heaters is to preheat the inlet air of engine component test rigs to simulate the actual engine operating condition.
EU-4	The standard operation of the FT-4 industrial drive engines/free turbine unit is to drive a compressor system that provides inlet air to engine component test rigs.
EU-5	The standard operation of the GG-8 stationary gas turbine engines is the conducting of performance evaluation tests.
EU-6	The standard operation of the combustion test rig X-960 is the conducting of performance evaluation tests.
GEU-7, GEU-8, GEU-9	The standard operation of the emergency engines is to provide emergency power (electrical & fire pumps) for operations in the facility or maintenance purposes.
EU-12, EU-13 & EU-23	The standard operation of the spray booths is to apply specialty coatings, R&D coatings and DOD coatings to uninstalled engine parts, fixtures, parts and products.
GEU-17 & EU-19	The standard operation of the three boilers is to supply steam, which is used primarily for HVAC, manufacturing processes and experimental test.
EU-18	The standard operation of the Solar Taurus 70 gas turbine is to power an electrical generator and supply steam, which is used primarily for HVAC, manufacturing processes and experimental test.

Section III: Applicable Requirements and Compliance Demonstration

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

A. GROUPED EMISSIONS UNIT 3 (GEU-3) Non-Vitiated Inlet Air Heaters 2 and 3; NSR Permit Nos. 104-0028 & 104-0029; 40 CFR Part 63 Subpart DDDDD (Limited-Use Subcategory), RCSEA §22a-174-22e, Installed 1979

1. Fuel Use and Hours of Operation

- a. *Limitation or Restriction (each unit)* [P104-0028 & 104-0029]
 - i. Allowable Fuel: Jet A and Propane
 - ii. Maximum Fuel Firing Rate:
 - (A) Jet A: 500 gal/hr
 - (B) Propane: 14,000 scfh
 - iii. Maximum Heat Input (MMBtu/hr):
 - (A) Jet A: 67.5
 - (B) Propane: 35
 - iv. Maximum Fuel Consumption over any Consecutive 12 Month Period (gallons/yr)
 - (A) Jet A: 78,350
 - (B) Propane: 114,720
 - v. Maximum Jet A Fuel Sulfur Content (% by weight, dry basis): 0.1%
 - vi. Maximum Hours of Operation (hours/day): 14
- b. *Monitoring Requirements*
 - i. When more than one fuel supply tank is to service Inlet Air Heater 2 or when multiple sources, other than Inlet Air Heater 3, are supplied by one fuel tank, a fuel metering device shall be used to continuously monitor fuel feed to this permitted source. [P104-0028]
 - ii. When more than one fuel supply tank is to service Inlet Air Heater 3 or when multiple sources, other than Inlet Air Heater 2, are supplied by one fuel tank, a fuel metering device shall be used to continuously monitor fuel feed to this permitted source. [P104-0029]
 - iii. Any day that either or both units in GEU-3 operates, the Permittee shall monitor total hours of operation for each unit. [P104-0028 & P104-0029]
- c. *Record Keeping Requirements* [P104-0028 & P104-0029]
 - i. The Permittee shall keep records of daily, monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.

Section III: Applicable Requirements and Compliance Demonstration

- ii. The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by this equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel.
- iii. Any day that either or both units in GEU-3 operates, the Permittee shall keep records of hourly operation for each unit.

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. Pollutant Emissions

a. Limitation or Restriction [P104-0028 & 104-0029]

- i. The Permittee shall not exceed the following Jet A emissions for each unit (lb/MMBtu):
 - (A) PM₁₀: 7.4E-3
 - (B) SO₂: 0.10
 - (C) NO_x: 0.20
 - (D) VOC: 1.48E-3
 - (E) CO: 0.037
 - (F) Pb: 8.9E-6
- ii. The Permittee shall not exceed the following Propane emissions for each unit (lb/MMBtu):
 - (A) PM₁₀: 7.7E-3
 - (B) SO₂: 2.0E-4
 - (C) NO_x: 0.20
 - (D) VOC: 8.8E-3
 - (E) CO: 0.082
- iii. The Permittee shall not exceed the following emissions for each unit (lb/yr):
 - (A) PM₁₀: 160
 - (B) SO₂: 1,060
 - (C) NO_x: 4,220
 - (D) VOC: 120
 - (E) CO: 1,260
 - (F) Pb: 2
- iv. The Permittee shall not exceed the following emissions for each unit (tons/yr):
 - (A) PM₁₀: 0.08

Section III: Applicable Requirements and Compliance Demonstration

- (B) SO₂: 0.53
 - (C) NO_x: 2.11
 - (D) VOC: 0.06
 - (E) CO: 0.63
 - (F) Pb: 0.001
- v. This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29.

[STATE ONLY REQUIREMENT]

b. *Monitoring Requirements* [P104-0028 & 104-0029]

- i. The Permittee shall calculate the emissions in Part III.A.2 of this Title V permit from the following sources:

(A) Jet Fuel (HHV 135,000 Btu/gal)

- (1) PM₁₀, CO, VOC: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Tables 1.3-1, 1.3-2 & 1.3-3, SCC = 10200502, May 2010
- (2) SO_x: CTDEEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight.
- (3) H₂SO₄: CTDEEP emission factor of 2.45 S lb/1000 gal, where S is the maximum percent sulfur content by weight.
- (4) Pb: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Table 1.3-10, May 2010

(B) Propane (HHV 91,500 Btu/gal)

- (1) PM₁₀, SO_x, CO, VOC: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Table 1.5-1, SCC = 10201002, July 2008

(C) NO_x (both fuels): Latest stack test data

c. *Record Keeping Requirements*

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀, SO₂, NO_x, VOC, CO and Pb emissions in units of pounds for each unit. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0028 & 104-0029]
- ii. The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.A.2.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)]

Section III: Applicable Requirements and Compliance Demonstration

3. National Emission Standards (NESHAP) for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, Limited-Use Subcategory

a. Limitation or Restriction

- i. The Permittee shall complete a tune-up on GEU-3 every 5 years as specified in 40 CFR §63.7540. The tune-up should include, at a minimum, the following: [40 CFR §63.7500(c)]
 - (A) Inspection of the burner, cleaning and replacement of any components of the burner, as necessary.
 - (B) Inspection of the flame pattern and adjustment of the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - (C) Inspection of the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
 - (D) Optimization of the total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available.
 - (E) Measurement of the concentrations in the effluent stream of CO in parts per million, by volume (ppmv) and oxygen in volume percent, before and after the adjustments are made.

b. Monitoring Requirements

The Permittee shall conduct subsequent tune-ups no more than 61 months after the previous tune-up. [40 CFR §63.7515(d)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the tune-ups. Such records shall include the following [40 CFR §63.7540(a)(10)(vi)]:
 - (A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of GEU-3.
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up.
- ii. The Permittee shall keep all applicable records in accordance with 40 CFR §§63.7555(a)(1) through (3).
- iii. The Permittee shall make and keep daily fuel use records for the days GEU-3 were in operation. [40 CFR §§63.7525(k) and 63.7555(a)(3)]

d. Reporting Requirements

- i. The Permittee shall submit a five year compliance report in accordance with 40 CFR §§63.7550(b)(1) through (b)(4). The compliance report must contain the following information: [40 CFR §63.7550(c)]
 - (A) Company and Facility name and address
 - (B) Process unit information, emissions limitations, and operating parameter limitations.
 - (C) Date of report and beginning and ending dates of the reporting period.

Section III: Applicable Requirements and Compliance Demonstration

- (D) Include the date of the most recent tune-up for each unit and the date of the most recent burner inspection if it was not done on a five year period and was delayed until the next scheduled or unscheduled unit shutdown.
- (E) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

4. Alternate NOx RACT Compliance: RCSA §22a-174-22e

- a. The Permittee shall make and keep the following records:

[RCSA §22a-174-22e(j)(2)(B)]

The date and work performed for repairs, replacement of parts and other maintenance.

B. EMISSIONS UNIT 4 (EU-4): FT-4 Industrial Drive Engines/Free Turbine Unit, Permit No. 104-0027, RCSA §22a-174-22e, Installed 1979

1. Fuel Use and Hours of Operation

- a. *Limitation or Restriction* [P104-0027]

- i. Fuel Type: Jet A
- ii. Maximum Fuel Firing Rate (lb/hr): 20,000
- iii. Maximum Heat Input (MMBtu/hr): 401.2
- iv. The maximum fuel consumption over any consecutive 12 month period (gallons/yr): 1,257,777
- v. Maximum fuel sulfur content (% by weight, dry basis); 0.1
- vi. Maximum Daily Hours of Operation: 14

- b. *Monitoring Requirements* [P104-0027]

The Permittee shall use a fuel metering device to continuously monitor fuel feed when more than one fuel supply tank is to service this source, or when multiple sources are supplied by one fuel tank.

- c. *Record Keeping Requirements*

- i. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding the current month's fuel usage to that of the previous eleven 11 months. These calculations shall be made on a monthly basis and made available for inspection by this Bureau upon request. [P104-0027]
- ii. The Permittee shall keep records of the sulfur content of the fuel burned in this source. [P104-0027]
- iii. The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.B.1.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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

Section III: Applicable Requirements and Compliance Demonstration

2. Pollutant Emissions

a. Limitation or Restriction [P104-0027]

i. The Permittee shall not exceed the following emissions (lb/MMBtu):

- (A) PM₁₀: 0.089
- (B) SO_x: 0.100
- (C) NO_x: 0.674
- (D) VOC: 0.005
- (E) CO: 0.070
- (F) Pb: 5.8E-5
- (G) Sulfuric Acid: 0.0018

ii. The Permittee shall not exceed the following ASC ($\mu\text{g}/\text{m}^3$):

- (A) Pb: 12.7
- (B) Sulfuric Acid: 395.8

iii. The Permittee shall not exceed the following emissions (tons/yr):

- (A) PM₁₀: 7.56
- (B) SO_x: 8.49
- (C) NO_x: 57.22
- (D) VOC: 0.41
- (E) CO: 5.95
- (F) Pb: 0.005
- (G) Sulfuric Acid: 0.154

b. Monitoring Requirements [P104-0027]

i. The Permittee shall calculate the emissions in Part III.B.2.a. of this Title V permit from the following sources:

- (A) Jet Fuel (HHV 135,000 Btu/gal, Density 6.73 lb/gal)
 - (1) PM₁₀, NO_x: Engine Test Data supplied by P&W in 1977
 - (2) SO_x: CTDEEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight.
 - (3) CO, VOC in Climbout Mode: Compilation of Air Pollutant Emission Factors, AP-42, second edition, Table 3.2-1-4, page 3.2-1-6, April 1973
 - (4) H₂SO₄: CTDEEP emission factor of 2.45 S lb/1000 gal, where S is the maximum percent sulfur content by weight.
 - (5) Pb: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Table 3.1-7, page 3.1-8, January 1995

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c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.B.2.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)]

3. Alternate NO_x RACT Compliance: RCSA §22a-174-22e

a. The Permittee shall make and keep the following records:

[RCSA §22a-174-22e(j)(2)(B)]

- i. The date and work performed for repairs, replacement of parts and other maintenance.

C. EMISSIONS UNIT 5 (EU-5): Testing of GG-8 Stationary Gas Turbines, Permit No. 104-0062, RCSA §22a-174-22e, Installed 01/29/91

1. Fuel Use

a. Limitation or Restriction [P104-0062]

- i. Allowable Fuel: Jet Fuel

- ii. Maximum Fuel Firing Rate:

(A) 1,901.9 gal/hr, or

(B) 12,800 lb/hr;

- iii. Maximum Heat Input (MMBtu/hr): 249

- iv. Maximum Fuel Consumption over any Consecutive 12 Month Period (gal): 259,609

- v. Maximum Sulfur Content (% by weight, dry basis): 0.2

b. Monitoring Requirements [P104-0062]

- i. When more than one fuel supply tank is to service EU-5 or when multiple sources are supplied by one fuel tank, the Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor fuel feed to this permitted source.

- ii. The Permittee shall monitor the sulfur content of the liquid fuels using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment or by sampling after each transfer/shipment to the large bulk storage tanks.

c. Record Keeping Requirements [P104-0062]

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.

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- ii. The Permittee shall keep records of the fuel certification and sampling that include the following information: the date of delivery, the name of the fuel supplier, and type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered.

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. Pollutant Emissions

a. Limitation or Restriction [P104-0062]

- i. The Permittee shall not exceed the following emissions (lb/hr):

- (A) PM₁₀: 15.2
- (B) SO_x: 51.4
- (C) NO_x: 230
- (D) VOC: 12
- (E) CO: 32
- (F) Pb: 0.01444

- ii. The Permittee shall not exceed the MASC for the following ($\mu\text{g}/\text{m}^3$):

- (A) Pb: 1.7
- (B) Sulfuric Acid: 112

- iii. The Permittee shall not exceed the following emissions (TPY):

- (A) PM₁₀: 1.037
- (B) SO_x: 3.505
- (C) NO_x: 15.7
- (D) VOC: 0.819
- (E) CO: 2.184
- (F) Pb: 0.001
- (G) Sulfuric Acid: 0.064

b. Monitoring Requirements [P104-0062]

- i. The Permittee shall calculate the emissions in Part III.C.2.a. of this Title V permit from the following sources:

- (A) PM₁₀: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Tables 3.1-2, page 3.1-4, January 1995
- (B) SO_x: CTDEEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight.
- (C) NO_x, VOC, CO: P&W annual average emission test data for GG-8 turbines, 6/15/95.

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- (D) H₂SO₄: CTDEEP emission factor of 2.45 S lb/1000 gal, where S is the maximum percent sulfur content by weight.
- (E) Pb: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Table 3.1-7, page 3.1-8, January 1995

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.C.2.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)]

3. Alternate NO_x RACT Compliance: RCSA §22a-174-22e

- a. The Permittee shall make and keep the following records:

[RCSA §22a-174-22e(j)(2)(B)]

- i. The date and work performed for repairs, replacement of parts and other maintenance.

D. EMISSIONS UNIT 6 (EU-6): Combustion Test Rig X-960, P104-0030, RCSA §22a-174-22e, Installed 1979

1. Fuel Use and Hours of Operation

a. Limitation or Restriction [P104-0030]

- i. Allowable Fuels: Aviation Fuel, No. 2 oil/diesel, and Natural Gas
- ii. Maximum Fuel Firing Rate:
 - (A) Liquid: 7,650 lb/hr
 - (B) Natural Gas: 153,400 cfh
- iii. Maximum Heat Input, All fuels (MMBtu/hr): 153.4
- iv. Maximum Fuel Consumption over any Consecutive 12 Month Period
 - (A) Liquid: 294,502 (gallons/yr) or
 - (B) Natural Gas: 36 MMCF, where 1 MMCF Natural Gas may be substituted for each 8,180.6 gallons of liquid fuel
- v. Maximum Fuel Sulfur Content (% by weight, dry basis): 0.1
- vi. Maximum Hours of Operation (hours/day): 14

b. Monitoring Requirements [P104-0030]

- i. The Permittee shall continuously monitor fuel consumption using a non-resettable totalizing fuel meter. [P104-0030]
- ii. Record keeping specified in Section III.D.1.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.
[RCSA §22a-174-33(j)(1)(K)(ii)]

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c. *Record Keeping Requirements* [P104-0030]

- i. The Permittee shall record the monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
- ii. The Permitted shall keep records of the fuel certification for each delivery of aviation fuel and No. 2 Oil/diesel from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by this equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel.
- iii. The Permittee shall keep all records of the daily hours of operation. Records shall include:
 - (A) The name or clock number of the responsible individual,
 - (B) The date and hours run each day,
 - (C) The Permittee shall total the hours of operation annually.

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. Pollutant Emissions

a. *Limitation or Restriction* [P104-0030]

- i. The Permittee shall not exceed the following liquid fuel emissions (lb/MMBtu):
 - (A) PM₁₀/PM_{2.5}: 0.006
 - (B) SO_x: 0.100
 - (C) NO_x: 0.889
 - (D) VOC: 0.104
 - (E) CO: 0.148
 - (F) Pb: 5.8E-5
- ii. The Permittee shall not exceed the following Natural Gas emissions (lb/MMBtu):
 - (A) PM₁₀/PM_{2.5}: 0.042
 - (B) SO_x: 0.0006
 - (C) NO_x: 0.44
 - (D) VOC: 0.091
 - (E) CO: 0.317
- iii. The Permittee shall not exceed the following consecutive 12 month emission limited (tons/yr):
 - (A) PM₁₀/PM_{2.5}: 0.75
 - (B) SO_x: 1.99

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(C) NO_x: 17.67

(D) VOC: 2.06

(E) CO: 5.71

(F) Pb: 0.001

b. Monitoring Requirements [P104-0030]

i. The Permittee shall calculate the emissions in Part III.D.2 of this Title V permit from the following sources:

(A) Liquid Fuel

(1) PM_{10/2.5}, NO_x, VOC, CO: P&W Average Engine Test Data, 02/15/96

(2) SO_x (Aviation Fuel): Emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight.

(3) SO_x (No. 2 Oil/diesel): Emission factor of 142 S lb/1000 gal, where S is the maximum percent sulfur content by weight.

(4) Pb and HAPs: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 3.1, Table 3.1-7, 1/1995

(B) Natural Gas

(1) PM_{10/2.5}, SO_x, NO_x: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 3.1, Table 3.1-2, 1/1995

(2) VOC & CO: P&W Average Engine Test Data, 03/13/96

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.D.2.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)]

3. Alternate NO_x RACT Compliance: RCSA §22a-174-22e

a. The Permittee shall make and keep the following records:

[RCSA §22a-174-22e(j)(2)(B)]

i. The date and work performed for repairs, replacement of parts and other maintenance.

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E. GROUPED EMISSIONS UNIT 7 (GEU-7) - Emergency Engines subject to RCSA §22a-174-3b(e) and 40 CFR Part 63 Subpart ZZZZ

Engine 475613 (Cummins Model No. NTA855-G3, constructed after 12/19/02)

Engine 463875 (Cummins Model No. NTA495-G2, constructed 03/01/96)

Engine 465440 (Onan Model No. 6CTA8.3, constructed 03/01/96)

Engine 805753 (Kohler Model No. 4045TF250, constructed 11/01/04)

1. Hours of Operation

a. Limitation or Restriction [RCSA §22a-174-3b(e)(2)(C)]

- i. The Permittee shall not cause or allow each emergency engine in GEU-7 to operate except during periods of testing and scheduled maintenance or during an emergency; and
- ii. Unless operation of such engine shall not exceed 300 hours during any 12 month rolling aggregate.

b. Monitoring Requirements

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

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall make and maintain records of the hours of operation of each emergency engine for each month and 12 month rolling aggregate. [RCSA §22a-174-3b(e)(4)]

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

2. Sulfur Content

a. Limitation or Restriction

The Permittee shall not combust fuel in GEU-7 with a fuel sulfur content in excess of 15 ppm. [RCSA §22a-174-3b(e)(2)(D)]

b. Monitoring Requirements

Record keeping specified in Section III.E.2.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall keep any of the following records to demonstrate compliance of the sulfur content of fuel used in GEU-7: [RCSA §22a-174-3b(h)]
 - (A) A fuel certification for a delivery of nongaseous 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 a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment.

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d. Reporting Requirements

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

3. Nitrogen Oxides

a. Limitation or Restriction

i. There are no emission limitations on nitrogen oxide emissions for GEU-7.

[RCSA §22a-174-22e(c)(5)]

ii. Engine 475613 has record keeping and reporting requirements since it is a reciprocating engine with a maximum rated capacity of 3 MMBtu/hr or more.

[RCSA §22a-174-22e(b)(1)(E)]

iii. The Permittee shall not operate Engine 475613 for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be "moderate to unhealthy for sensitive groups" or greater. If, subsequent to the initial forecast of "moderate to unhealthy for sensitive groups" or greater, the forecast is revised to "moderate" or lower, the Permittee is no longer prohibited from operating Engine 475613 for routine, scheduled testing or maintenance for the remainder of that day. The Permittee may rely on an ozone forecast of "moderate" or lower obtained after 3 p.m. on the preceding day. Subsequent changes to the ozone forecast after 3 p.m. that forecast ozone levels of "moderate to unhealthy for sensitive groups" or greater shall not obligate Permittee to refrain from operation of GEU-7 at the facility on the following day.

[RCSA §22a-174-22e(d)(14)]

b. Monitoring Requirements

Record keeping specified in Section III.E.3.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

i. On and After May 1, 2018, engine 475613 has record keeping requirements because it is a reciprocating engine with a maximum rated capacity of 3 MMBtu/hr or more:

[RCSA §22a-174-22e(b)(1)(A)(i)]

(A) The Permittee shall keep the following records:

[RCSA §§22a-174-22e(j)(2)(A), (B), (F), & (G)]

(1) The Permittee shall keep the applicable records pursuant to 40 CFR §63.6655.

(2) The date and work performed for repairs, replacement or parts and other maintenance;

(3) Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22e; and

(4) Any other records or reports required by an order or permit issued by the commissioner pursuant to RCSA §22a-174-22e.

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d. Reporting Requirements

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

4. 40 CFR Part 63 Subpart ZZZZ Compliance

See Section III.F of this Title V permit.

F. GROUPED EMISSIONS UNITS 7 & 8 (GEU-7 & 8): Emergency Engines subject to National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines - 40 CFR Part 63 Subpart ZZZZ

Existing Engines, Less than 500 bhp

GEU-7	GEU-8
Engine 463875	Engine 475299 (Cummins Model No. 4B3, Emergency Engine)
Engine 465440	Engine 475300 (CPG (Cummins) Model No. 4BT3.9, Emergency Engine)
Engine 805753	Engine 805751 (Cummins-Onan Model No. LPW4, Emergency Engine)
	Engine 457374 (Cummins Model No. NT855GS2, Emergency Engine)
	Engine R49397 (Cummins Model No. N855F, Fire Pump)
	Engine 801206 (Cummins Model No. N855GS, Emergency Engine)

GEU-7 Existing Engine, Greater than 500 bhp

Engine 475613	There are no 40 CFR Part 63 Subpart ZZZZ requirements for engine 475613.
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1. Operating Requirements

a. Limitation or Restriction

- i. The Permittee shall comply with the applicable work practice requirements found in 40 CFR §63.6602, Table 2c:

[40 CFR §63.6602]

(A) The Permittee shall change the oil and filter on each emergency engine every 500 hours of operation or annually, whichever comes first. [40 CFR §63.6602, Table 2c, Item 1.a]

(B) The Permittee shall inspect the air cleaner on each emergency engine every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR §63.6602, Table 2c, Item 1.b]

(C) The Permittee shall inspect all hoses and belts on each emergency engine every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR §63.6602, Table 2c Item 1.c]

(D) The Permittee shall minimize each engine's time spent at idle and minimize each engine's startup time at startup to a period needed for appropriate and safe loading of each engine, not to exceed 30 minutes, after which time the non-startup emissions limitations apply.

[40 CFR §63.6602, Table 2c, Item 1; 40 CFR §63.6625(h)]

(E) 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 Sections III.F.1.a.i. of this Title V permit, or if performing the work practice on the required schedule

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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.

[40 CFR §63.6602, Table 2c, Footnote 1]

- (F) The Permittee shall operate and maintain each emergency engine 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)]

- (G) The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Section III.F.1.a.i.(A) of this Title V permit. The oil analysis must be performed every 500 hours of operation or annually, whichever comes first. The analysis must, at a minimum, analyze the following three parameters: Total Base Number, viscosity, and percent water content. Upon analysis, if the Total Base Number is less than 30 percent of the Total Base Number of the oil when new, the viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new, or the percent water content (by volume) is greater than 0.5, then the Permittee shall change the oil within two business days of receiving the results of the analysis. If the results of the oil analysis indicate that these thresholds are not exceeded, the Permittee is not required to change the oil. If any emergency engine is not in operation when the results of the oil analysis are received, the Permittee shall change the oil within two business days or before commencing operation, whichever is later. This analysis program must be part of the maintenance plan for the emergency engines.

[40 CFR §63.6625(i)]

- ii. The Permittee shall, at all times, operate and maintain each emergency engine, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR §63.6605(b)]
- iii. The Permittee shall operate each emergency engine according to the following requirements. If the Permittee does not operate each engine in accordance with the following requirements, the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all of the requirements for non-emergency engines. [40 §CFR 63.6640(f)]:

- (A) There is no time limit on the use of each emergency engine in emergency situations.

[40 CFR §63.6640(f)(1)]

- (1) GEU-7 existing engines are limited by RCSA §22a-174-3b(e)(C) to less than or equal to 300 hours during any twelve month rolling aggregate.
- (B) The Permittee may operate GEU-7 and for any combination of the following, for a maximum of 100 hours per calendar year. The 100 hours per year shall be included in the 300 hour per year operating restriction of RCSA §22a-174-3b(e)(C) for GEU-7 engines.
- (1) Each emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the

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owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency engine beyond 100 hours per calendar year.

[40 CFR §63.6640(f)(2)(i)]

- (2) Each emergency engine in GEU-8 may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Section III.F.1.a.iii.(B) of this Title V permit. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR §63.6640(f)(3)]

b. *Monitoring Requirements*

The Permittee shall install a non-resettable hour meter on each emergency engine.

[40 CFR §63.6625(f); RCSA §22a-174-33(j)(1)(K)(ii) (Engine 475613)]

c. *Record Keeping Requirements*

i. Existing Engines, Less than 500 bhp

- (A) The Permittee shall make and keep records of the parameters that analyzed as part of the oil analysis program, the results of any such analysis, and the oil changes for each emergency engine. [40 CFR §63.6625(i)]
- (B) The Permittee shall keep a copy of each notification and report submitted to comply with 40 Part CFR Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification of Compliance Status submitted. [40 CFR §63.6655(a)(1)]
- (C) The Permittee shall make and keep records of the occurrence and duration of any malfunction in operation. [40 CFR §63.6655(a)(2)]
- (D) The Permittee shall make and keep records of any required performance tests and performance evaluations. [40 CFR §63.6655(a)(3)]
- (E) The Permittee shall make and keep records of actions taken during periods of malfunction to minimize emissions in accordance with Section III.F.1.a.ii. of this Title V permit, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR §63.6655(a)(5)]
- (F) The Permittee shall make and keep records to show continuous compliance with each applicable work practice standard in 40 CFR Part 63 Subpart ZZZZ, Table 6. [40 CFR §63.6655(d)]
- (G) The Permittee shall make and keep records of the maintenance conducted on each emergency engine in order to demonstrate that the engine was operated and maintained according to the Permittee's maintenance plan. [40 CFR §63.6655(e)]
- (H) The Permittee shall make and keep records of the hours of operation that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operations, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is operated for the purpose of a deviation in voltage or frequency, the Permittee shall make and keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for this purpose. [40 CFR §63.6655(f)]

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- ii. For Engine 475613, the Permittee shall maintain records sufficient to determine compliance with the applicable limitation or restriction in Section III.F.1.a of this Title V permit.

[RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

- i. Existing Engines, Less than 500 bhp

(A) The Permittee shall report to the Administrator each instance in which a deviation from a work practice standard in Section III.F.1.a. of this Title V permit occurs. [40 CFR §63.6640(b)]

(B) 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 §63.6602, Table 2c, Footnote 1]

(C) For each deviation from a work practice standard in Section III.F.1.a. of this Title V permit, the Compliance report must contain the following information [40 CFR §63.6650(d)]:

(1) The Company name and address

(2) A statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a 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 also include a description of actions taken by the Permittee during a malfunction to minimize emissions in accordance with Section III.F.1.a.ii. of this Title V permit, including actions taken to correct a malfunction.

(5) The total operating time of the emergency engine at which the deviation occurred during the reporting period.

(6) Information on the number duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

- ii. For Engine 475613, 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

G. GROUPED EMISSIONS UNIT 9 (GEU-9): Emergency Engines Subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (NSPS) 40 CFR Part 60 Subpart III; GEU-9 complies with 40 CFR Part 63 Subpart ZZZZ pursuant to 40 CFR §63.6590(c)

Engine 479031 (Cummins Model No. 4BT3.3-G6 NR, Installed 12/06/07, 60 kW)

Engine 479648 (Cummins Model No. QSB7-G5 NR3, Installed 01/01/12, 271 kW)

Engine 481931 (Cummins Model No. CFP9E-F10, Fire Pump, 250 kW, Installed 02/13/19)

1. 40 CFR Part 60 Subpart III

a. Limitation or Restriction

- i. The Permittee shall not cause or allow Engine 479031 to exceed the following emissions limitations, except as provided in 40 CFR §60.4212(c). [40 CFR §60.4205(b)]

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- (A) NMHC + NO_x: 7.5 g/kW-hr
 - (B) CO: 5.0 g/kW-hr
 - (C) PM: 0.4 g/kW-hr
- ii. The Permittee shall not cause or allow Engine 479648 to exceed the following emissions limitations, except as provided in 40 CFR §60.4212(c)]
- [40 CFR §60.4205(b)]
- (A) NMHC + NO_x: 4.0 g/kW-hr
 - (B) CO: 3.5 g/kW-hr
 - (C) PM: 0.2 g/kW-hr
- iii. The Permittee shall not cause or allow Engine 481931 to exceed the following emissions limitations. [40 CFR §60.4205(c)]
- (A) NMHC + NO_x: 4.0 g/kW-hr
 - (B) PM: 0.2 g/kW-hr
- iv. The Permittee shall:
- [40 CFR §60.4211(a)]
- (A) Operate and maintain GEU-9 according to the manufacturer's emission-related written instructions;
 - (B) Change only those emission-related settings that are permitted by the manufacturer; and
 - (C) Meet the requirements of 40 CFR Parts 89, and/or 1068, as applicable.
- b. *Monitoring Requirements*
- Record keeping specified in Section III.G.1.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.
- [RCSA §22a-174-33(j)(1)(K)(ii)]
- c. *Record Keeping Requirements*
- The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.G.1.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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

2. Hours of Operation

a. *Limitation or Restriction*

The Permittee shall comply with the applicable operating requirements pursuant to 40 CFR §60.4211(f).

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b. Monitoring Requirements

The Permittee shall install a non-resettable hour meter prior to startup of GEU-9.

[40 CFR §60.4209(a)]

c. Record Keeping Requirements

The Permittee shall comply with the applicable requirements pursuant to 40 CFR §60.4214.

d. Reporting Requirements

The Permittee shall comply with the applicable requirements pursuant to 40 CFR §60.4214.

3. Fuel Sulfur Content

a. Limitation or Restriction

The Permittee must use diesel fuel that meets the requirements found in 40 CFR §80.510(b) for GEU-9.

[40 CFR §60.4207(b)]

b. Monitoring Requirements

Record keeping specified in Section III.G.3.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

i. The Permittee shall keep any of the following records to demonstrate compliance of the sulfur content of fuel used in each emergency engine:

[RCSA §22a-174-33(j)(1)(K)(ii)]

(A) A fuel certification for a delivery of nongaseous 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 a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment.

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

H. EMISSIONS UNIT 23 (EU-23): ATR Industries Spray Booth, Permit No. 104-0153; 40 CFR Part 63 Subpart GG;

1. Operating Conditions

a. Limitation or Restriction [P104-0153]

i. The Permittee shall comply with the following:

(A) Type of Spray Gun: High Volume-Low Pressure (HVLP)

(B) Number of Concurrently Operating Spray Guns per Booth

(C) Maximum Hourly Coating Usage, as Applied (gal): 1.9

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- (D) Minimum Transfer Efficiency: 65%
 - (E) Minimum Particulate Control Matter Filter Removal Efficiency: 99.95%
 - (F) Maximum VOC Content per Gallon of Coating, excluding water and exempt VOC, as Applied (lb/gal): Not to exceed applicable VOC content limits in accordance with 40 CFR Part 63 Subpart GG.
 - (G) Maximum Annual Coating Usage, as Applied (gal): Not to exceed the allowable annual emission limits in Section III.H.2.a.i.(A)(1) of this Title V permit.
 - (1) The coating usage limits apply to any of the following components or mixtures of the following components: Paint, Enamel, Lacquer, Primer, Reducer, Sealer, Diluent, Additive, or other Coating Material or Preparation.
 - (H) Work Practices
 - (1) VOC containing coating, diluent or cleaning solvent, including a coating mixed on the premises, shall be stored in a nonabsorbent, 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.
 - (2) Spills and leaks of VOC-containing coating, diluent or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating, diluent or cleaning solvent shall be absorbed and removed immediately.
 - (3) 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.
 - (4) VOC-containing coating, diluent and cleaning solvent shall be conveyed from one location to another in a closed container or pipe.
 - (I) Control Equipment
 - (1) Maximum Pressure Drop Across Filter Media: 2.0 inches H₂O
 - (2) The filter media shall be changed when the pressure drop exceeds or falls below the manufacturer's recommended operating range or more frequently if required.
 - (3) The Permittee shall properly operate the control equipment at all times EU-23 is in operation and emitting air pollutants.
 - (J) The Permittee shall comply with all written recommendations set forth by the manufacturers for maintaining and operating EU-23 and particulate filter in order to achieve their guaranteed transfer and capture efficiencies.
- b. *Monitoring Requirements* [P104-0153]
- i. The Permittee shall continuously monitor the pressure drop across the filter media. The Permittee shall maintain an interlock system which will automatically shut down the coating spray application system if the pressure drop exceeds or falls below the filter manufacturer's recommended limits.
 - ii. The Permittee shall perform inspections of the control devices as recommended by the manufacturer.
- c. *Record Keeping Requirements* [P104-0153]
- i. The Permittee shall keep daily records for each coating and diluent used, such records shall include:
 - (A) Date coating used;

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- (B) Description of coating, including name and density (lb/gal);
 - (C) Volatile organic compound content by weight (lb VOC/gal);
 - (D) Water and exempt VOC content by weight (lb/gal);
 - (E) Quantity of coating used (gal/day);
 - (F) Quantity of diluent used for each coating (lb, gallons); and
 - (G) Classification of each coating or solvent used (i.e. primers, topcoats, specialty coating, research and development coating).
- ii. The Permittee shall maintain monthly records of all VOC containing cleaning solvents used in EU-23. Such records shall include:
 - (A) Name and description of each cleaning solvent;
 - (B) VOC content of each cleaning solvent, as applied, and the associated calculations;
 - (C) VOC content of each cleaning solvent, as supplied;
 - (D) The amount of each cleaning solvent used; and
 - (E) A description of the type of cleaning equipment and process.
 - iii. The Permittee shall keep material safety data sheets (MSDS) or technical data sheets (TDS) or Safety Data Sheets (SDS) for each paint and solvent used. Such information shall include the quantity and type of each hazardous air pollutant contained in the paint or solvent. For paperwork reduction, these sheets may be kept on a computer file in electronic form, access to above paperwork requirement may also be allowed via internet on-demand.
 - iv. Monthly usage records shall clearly display at a minimum, compliance with all materials usage and emissions set forth in Section III.H.1.a.i of this permit.
 - v. The Permittee shall keep records of equipment manufacturer specifications and written recommendations to include all maintenance, filter replacement and inspections.
- d. *Reporting Requirements*
- i. Reports of any exceedances of the material usage, set forth in Section III.H.1.a.i. of this permit, shall be submitted to the Department in writing within 30 days of the date of such exceedance. Such report shall at a minimum, include a description of the nature of the exceedance, the duration and magnitude of the exceedance, the steps taken to reestablish compliance and the success of such steps, and the steps taken to assure that compliance is maintained in the future. [P104-0153]
 - ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

2. Allowable VOC and Particulate Emission Limits

a. Limitation or Restriction [P104-0153]

- i. The Permittee shall not cause or allow EU-23 to exceed the emission limits stated herein at any time.
 - (A) VOC
 - (1) 1.83 tpy
 - (2) Premises wide emissions from all miscellaneous metal and plastic parts surface coating

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operations: 1,666 lb in any calendar month.

(B) Particulate Matter

- (1) PM:
 - (i) 0.13 lb/hr
 - (ii) 0.03 tpy
- (2) PM₁₀:
 - (i) 0.13 lb/hr
- (3) PM_{2.5}:
 - (i) 0.13 lb/hr
 - (ii) 0.03 tpy

(C) Hazardous Air Pollutants

EU-23 shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. [STATE ONLY REQUIREMENT]

(D) Demonstration of compliance with the above emission limits may be met by calculating the emission rates using emission factors from the following sources:

- (1) Material Balance
- (2) For Particulate only, the material balance calculations may assume a transfer efficiency of 65% and an overall particulate control efficiency of 99.95%
- (3) The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the emission limits in Section III.H.2.a.i. of this permit, as allowed by state or federal statute, law or regulation.

b. Monitoring Requirements

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

c. Record Keeping Requirements [P104-0153]

- i. The Permittee shall calculate and record the monthly and consecutive 12 month VOC, PM, PM₁₀, and PM_{2.5} emissions. The consecutive 12 month VOC, PM, PM₁₀, and PM_{2.5} 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.
- ii. The Permittee shall make and keep records showing compliance with the premises-wide limit of 1,666 pounds of VOC emissions per calendar month from all miscellaneous metal and plastic parts surface coating operations.
- iii. The Permittee shall keep records showing compliance with each hazardous air pollutant used in EU-23.

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d. Reporting Requirements

- i. Reports of any exceedances of the emission limitations, set forth in Section III.H.2.a.i, shall be submitted to the Department in writing within 30 days of the date of such exceedance. Such report shall at a minimum, include a description of the nature of the exceedance, the duration and magnitude of the exceedance, the steps taken to reestablish compliance and the success of such steps, and the steps taken to assure that compliance is maintained in the future. [P104-0153]
- 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

3. 40 CFR Part 63 Subpart GG Compliance

See Section III.J of this Title V permit.

I. EMISSIONS UNITS 12 & 13 (EU-12 & EU-13):

ATR Spray Booths 1 & 2, Permit Nos. 104-0126 & 104-0139

1. Allowed Coatings

a. Limitation or Restriction

- i. EU-12 [P104-0126]
 - (A) Type of Coatings Applied: Specialty coatings as defined by 40 CFR 63, Subpart GG and Appendix A and B of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations.
 - (B) Maximum VOC Content of Specialty Coatings as Applied (excluding water and exempt VOCs): Not to exceed VOC content limits as defined in section B.3(a)(1) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations.
 - (C) Type of Cleaners Used: All solvent cleaners used shall comply with 40 CFR 63.744 and section B.3(c) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations
 - (D) EU-12 shall only be used for the application of specialty coatings as defined by 40 CFR Part 63 Subpart GG and section B.3(a)(1) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations. If EU-12 is to be used for coatings other than those defined above, the Permittee must apply for a modification to this permit and the source may become subject to additional requirements of 40 CFR Part 63 Subpart GG and the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations.
- ii. EU-13 [P104-0139]
 - (A) Types of Coatings Applied:
 - (1) Specialty coatings as defined by 40 CFR 63, Subpart GG
 - (2) Specialty, R&D, Department of Defense "classified" and any other coatings which are exempt from the requirements of 40 CFR 63, Subpart GG.
 - (B) Maximum VOC Content of Specialty Coatings as Applied (excluding water and exempt VOCs):

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Not to exceed VOC content limits as defined in RCSA §22a-174-20 (s), as applicable and 40 CFR §63.745.

- (C) Type of Cleaners Used: All solvent cleaners used shall comply with 40 CFR 63.744.
- (D) EU-13 shall only be used for the application of coatings in accordance with Section III.I.1.a.ii. of this permit. If EU-13 is subject to a change that would constitute a modification as defined by RCSA §22-174-1, the Permittee must apply for a modification to this permit and the source may become subject to additional requirements of 40 CFR Part 63 Subpart GG.

b. Monitoring Requirements

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

c. Record Keeping Requirements

i. EU-12 Record Keeping Requirements [P104-0126]

- (A) The Permittee shall maintain records of all coatings (as applied) and cleaners used. Such records shall contain the following information along with records required by 40 CFR §63.752 and Section B.4 of the EPA Control Techniques Guideline.
 - (1) A current list of coatings in use with category and VOC content less water and less exempt VOC as applied;
 - (2) A current list of cleaners in use with VOC content less water and less exempt VOC as applied; and
 - (3) Solids content as applied.
- (B) The Permittee shall keep the following records hourly, daily and monthly:
 - (1) Date of application;
 - (2) Method of coating application;
 - (3) Name of coating or cleaner used; and
 - (4) Amount of each coating used.
- (C) Usage records for this booth along with Material Safety Data Sheets for each coating and diluent shall be maintained on site for a period of no less than five years and submitted to the Bureau upon request. Material Safety Data Sheets or technical data sheets must include the quantity and type of each hazardous air pollutant contained in the coating or diluent.

ii. EU-13 Record Keeping Requirements [P104-0139]

- (A) The Permittee shall keep hourly, daily, and monthly records of all coatings (as applied) and cleaners used in EU-13. Such records shall contain the following information along with records required by 40 CFR §63.752:
 - (1) Date coating used;
 - (2) Description of coating, including name and density (lb/gal);
 - (3) Volatile organic compound content by weight (lb VOC/gal);
 - (4) Water and exempt VOC content by weight (lb/gal);
 - (5) Quantity of coating used (gal/day)

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(6) Quantity of diluent used for each coating (lb, gallons)

- (B) The Permittee shall keep safety data sheets (SDS) or technical data sheets (TDS) or product data sheets (PDS) for each paint and solvent used. Such information shall include the quantity and type of each hazardous air pollutant contained in the paint or solvent. For paperwork reduction, these sheets may be kept on computer file in electronic form, access to above paperwork requirement may also be allowed via internet on-demand.
- (C) Daily records shall clearly display, at a minimum, compliance with the material usage limitations found in Section III.I.1.a.ii of this Title V permit

d. Reporting Requirements

- i. The Permittee shall submit to the Department, reports of any exceedances of the material usage, set forth in this permit, in writing within 30 days of the date of such exceedance. Such report shall at a minimum include: [P104-0139]
 - (A) a description of the nature of the exceedance;
 - (B) the duration and magnitude of the exceedance;
 - (C) the steps taken to reestablish compliance;
 - (D) the success of such steps; and
 - (E) the steps taken to assure that compliance is maintained in the future.
- ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

2. Operating Restrictions

a. Limitation or Restriction

- i. EU-12 [P104-0126]
 - (A) Number of HVLP Spray Guns: 1
 - (B) Maximum Application Rate of Spray Gun: 1.8 gal/hr
 - (C) Allowable Coating Methods: Spray, dip, brush, and tube
 - (D) Maximum Coating Methods Used at Any One Time: 1
 - (E) Minimum Transfer Efficiency of spray gun: 65%
 - (F) Minimum Particulate Control Efficiency: 97%
 - (G) EU-12, spray guns, and filter media shall comply with any supplied warranties, recommendations and stipulations set by the manufacturer of the equipment.
 - (H) All control equipment shall be properly installed and in good operating condition before EU-12 is operated.
- ii. EU-13 [P104-0139]
 - (A) Type of Spray Gun: HVLP
 - (B) Maximum Rated Spray Gun Throughput: 10 lb/hr
 - (C) Minimum Transfer Efficiency: 65%

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- (D) Minimum Particulate Control Matter Filter Removal Efficiency: 99.95%
 - (E) The Permittee shall properly operate, inspect and maintain the equipment in accordance with the manufacturer's specifications and recommendations.
 - (F) The Permittee shall cover all open drums and vessels that contain solvents, cleaners, coatings, or cleaning rags so as to minimize the amount of VOCs emitted to the atmosphere. Empty containers shall be disposed of in a manner consistent with handling techniques for hazardous materials, as applicable.
 - (G) The permittee shall operate in compliance with fugitive dust regulations in RCSA §22a-174-18.
 - (H) Legible signs shall be posted, maintained, and kept clearly visible at all times in both the paint blending and spray booth areas which clearly specify the allowable gallon per hour application rates.
 - (I) The Permittee shall comply with all written recommendations set forth the manufacturer(s) for maintaining and operating the spray gun, spray booth, and particulate filter in order to achieve their guaranteed transfer and capture efficiencies. The control equipment shall be place at all times. In addition, methods used to increase transfer efficiency shall include, but be limited to, the following:
 - (1) Minimize the distance from the spray gun to the object being coated;
 - (2) Minimize the air velocity in the spray booth (but not below health-based requirements); and
 - (3) Keep the atomizing air pressure to a minimum level, as recommended by the spray gun manufacturer.
 - (J) The Permittee shall properly operate the control equipment at all times that EU-13 is in operation and emitting air pollutants.
- iii. Housekeeping operations shall comply with 40 CFR §63.744 and section B.3(c) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations.

[P104-0126 & P104-0139]

b. Monitoring Requirements

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

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitations or restrictions in Section III.I.2.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)]

3. Allowable VOC and PM₁₀ Emission Limits

a. Limitation or Restriction

- i. The Permittee shall not exceed the following emission rates for EU-12: [P104-0126]

(A) VOC

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- (1) 7.17 lb/hr
- (2) 4.14 tons/yr
- (3) Premises wide emissions from miscellaneous metal parts and products coating operations: 1,666 lb/calendar month
- (B) PM₁₀
 - (1) 0.13 lb/hr
 - (2) 1.03E-2 tons/yr
- ii. The Permittee shall not exceed the following emission rates for EU-13: [P104-0139]
 - (A) VOC
 - (1) 10.00 lb/hr
 - (2) 1.83 tons/yr
 - (3) Premises wide miscellaneous metal surface coating limit: 1,666 lb in any calendar month per RCSA §22a-174-20(s)(7)
 - (B) PM_{10/2.5}
 - (1) 0.59 lb/hr
 - (2) 0.11 tons/yr
- iii. For EU-12, The emissions from any new compounds, for production or trial runs, shall be counted toward any applicable emission limit in Section III.I.3.ii of this Title V permit. [P104-0126]

b. *Monitoring Requirements*

- i. Demonstration of compliance for EU-12 shall be demonstrated by material balances from usage data and material safety data sheets. [P104-0126]
 - (A) The above statement shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.
- ii. Demonstration of compliance for EU-13 may be met by calculating the emission rates using emission factors from the following sources: [P104-0139]
 - (A) Material Balance from usage data and material data sheets or other technical documentation.
 - (B) For Particulate emissions only, the material balance calculations may assume a transfer efficiency of 65% and overall particulate control efficiency of 99.95%
 - (C) The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the emissions limits in Section III.I.3.a.ii of this permit, as allowed by state or federal statute, law or regulation.

c. *Record Keeping Requirements*

- i. EU-12 [P104-0126]
 - (A) The Permittee shall keep the following records hourly, daily and monthly:
 - (1) VOC emitted (lb or ton); and

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- (2) PM₁₀ emitted (lb or ton).
 - (B) The twelve month record of VOC and particulate emissions shall be determined by adding the current month's record to that of the previous eleven months. These calculations shall be made on a monthly basis.
 - (C) The Permittee shall keep monthly records of VOC emissions from all surface coating operations at the premises.
 - (D) The Permittee shall keep sufficient records of emissions from any new compounds, for production or trial runs, to show compliance with the applicable emission limit in Section III.I.3.ii of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]
- ii. EU-13 [P104-0139]
- (A) The Permittee shall calculate and record the hourly, daily, and monthly consecutive 12 month VOC, PM, PM₁₀, and PM_{2.5} emissions. The consecutive 12 month VOC, PM, PM₁₀, and PM_{2.5} 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 month.
 - (1) Daily records shall clearly display, at a minimum, compliance with all emissions limitations found in Section III.I.3.a.ii of this Title V permit.
 - (B) The Permittee shall keep monthly records of VOC emissions from all surface coating operations at the premises.
 - (C) The Permittee shall keep monthly records showing compliance with the premises-wide limit of 1,666 pounds of VOC emissions per calendar month from all miscellaneous metal and plastic parts surface coating operations.
 - (D) The Permittee shall keep monthly records of all VOC containing cleaning solvents used in EU-13 in accordance with 40 CFR §63.752(b).
 - (E) The Permittee shall keep safety data sheets (SDS) or technical data sheets (TDS) or product data sheets (PDS) for each paint and solvent used. Such information shall include the quantity and type of each hazardous air pollutant contained in the paint or solvent. For paperwork reduction, these sheets may be kept on computer file in electronic form, assess to above paperwork requirement may also be allowed via internet on-demand.

d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventative measures taken with respect thereto, and the dates of such actions and measures, as follows: [P104-0139]
 - (A) For any hazardous air pollutant, no later than twenty-four (24) hours after such deviation commenced; and
 - (B) For any other regulated air pollutant, no later than ten (10) days after such deviation commenced.
- ii. The Permittee shall submit to the Department, reports of any exceedances of the emission limitations, set forth in Section III.I.3.a.ii. of this Title V permit, in writing within 30 days of the date of such exceedance. Such report shall at a minimum include: [P104-0139]
 - (A) a description of the nature of the exceedance;

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- (B) the duration and magnitude of the exceedance;
 - (C) the steps taken to reestablish compliance;
 - (D) the success of such steps; and
 - (E) the steps taken to assure that compliance is maintained in the future.
- 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

4. Hazardous Air Pollutant Compliance [STATE ONLY REQUIREMENT]

a. Limitation or Restriction

- i. Chemical compounds, e.g., coatings, solvents, etc., used by this source now or in the future, either for production or on a trial basis, which contain hazardous air pollutants (HAPs) that are regulated under RCSA §22a-174-29 are allowed provided that: [P104-0126 & P104-0139]
- (A) EU-12 & EU-13 shall not cause an exceedance of the MASC for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29; and
 - (B) The change does not otherwise constitute a modification, as defined in RCSA §22a-174-1.

b. Monitoring Requirements

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

c. Record Keeping Requirements

- i. The Permittee shall keep records of all compounds used, and MSDS's or technical data sheets. [P104-0126]
- ii. The Permittee shall keep safety data sheets (SDS) or technical data sheets (TDS) or product data sheets (PDS) for each paint and solvent used. Such information shall include the quantity and type of each hazardous air pollutant contained in the paint or solvent. For paperwork reduction, these sheets may be kept on computer file in electronic form, access to above paperwork requirement may also be allowed via internet on-demand. [P104-0139]
- iii. The Permittee maintains a record of any changes and a demonstration of compliance with permit limits, within 30 days of such change. [RCSA §22a-174-33(j)(1)(K)]
- iv. The Permittee shall make and keep calculations demonstrating compliance with the maximum allowable stack concentrations for each hazardous air pollutant emitted in accordance with RCSA §22a-174-29. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

- i. For EU-12, the Permittee submits a report of any changes and a demonstration of compliance with the requirements of Section III.I.4.a. of this Title V permit, within thirty (30) days of such changes. [P104-0126]
- ii. For EU-12 and EU-13, 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

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5. 40 CFR Part 63 Subpart GG Compliance

See Section III.J of this Title V permit.

J. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR AEROSPACE MANUFACTURING AND REWORK FACILITIES – 40 CFR Part 63 Subpart GG

EU-12, EU-13, EU-23, and GEU-18

1. Miscellaneous Cleaning Operations (GEU-18)

a. Limitation or Restriction

- i. The Permittee shall comply with the following housekeeping measures unless the cleaning solvent used is identified in Table 1 of 40 CFR §63.744 or meets the definition of “Non-HAP material” in 40 CFR §63.742. The following requirements do not apply to spent cleaning solvents, and solvent-laden applicators that are subject to and handled and stored in compliance with 40 CFR Parts 262 through 268 (including the air emission control requirements in 40 CFR Part 265 Subpart CC).

[40 CFR §63.744(a)]

- (A) The Permittee shall place used solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.
 - (B) The Permittee shall store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers
 - (C) The Permittee shall conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.
- ii. The Permittee shall use cleaning solvents for hand-wipe cleaning that meet one of the following requirements. Cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in 40 CFR §63.741(f) are exempt from requirements in 40 CFR §§63.744(b)(1) through 63.744(b)(3). [40 CFR §63.744(b)]
 - (A) Meet one of the composition requirements in 40 CFR §63.744, Table 1.
 - (B) Have a composite vapor pressure of 45 mm Hg (24.1 in. H₂O) or less at 20 °C (68 °F); or
 - iii. The Permittee shall clean spray guns using one or more of the techniques, or their equivalent, specified in 40 CFR §§63.744(c)(1) through (c)(4). Spray gun cleaning operations using 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(c)(1) through (c)(4). [40 CFR §63.744(c)]
 - (A) 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 the solvent through the gun.
 - (B) 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

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closed when not in use.

- (C) 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.
- (D) Atomizing cleaning. Clean the spray gun by forcing the cleaning solution 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 Requirements

- i. 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)]
- ii. For all other limitations found in Section III.J.1.a of this Title V permit, record keeping specified in Section III.J.1.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall comply with applicable record keeping requirements pursuant to 40 CFR §63.752(a).
- ii. The Permittee shall comply with the applicable record keeping requirement for cleaning operation pursuant to 40 CFR §63.752(b).

d. Reporting Requirements

- i. The Permittee shall comply with the applicable general reporting requirements pursuant to 40 CFR §63.753(a).
- ii. The Permittee shall comply with the applicable cleaning operation reporting requirements pursuant to 40 CFR §63.753(b).

2. EU-12, EU-13, EU-23 Coating Standards

a. Limitation or Restriction

- i. The Permittee shall conduct the handling and transfer of primers, topcoats, and specialty coatings to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. [40 CFR §63.745(b)]
- ii. The Permittee shall comply with the applicable requirements for uncontrolled coatings pursuant to 40 CFR §§63.745(c)(5) & (6)
- iii. The Permittee shall comply with the coating limitations in 40 CFR §63.745(c) using the applicable methods specified in 40 CFR §63.745(e).
- iv. The Permittee shall comply with the applicable application equipment pursuant to 40 CFR §63.745(f).
- v. The Permittee shall comply with the applicable inorganic HAP emission requirements pursuant to 40 CFR §63.745(g)

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b. Monitoring Requirements

- i. The Permittee shall comply with the monitoring requirements, when applicable, to meet the requirements of 40 CFR §63.745(g)(2).
[40 CFR §63.751(c)]
- ii. For all other limitations found in Section III.J.2.a of this Title V permit, record keeping specified in Section III.J.2.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.
[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall comply with the applicable record keeping requirements for organic HAP and VOC pursuant to 40 CFR §63.752(c)
- ii. The Permittee shall comply with the applicable record keeping requirements for inorganic HAP and VOC pursuant to 40 CFR §63.752(d).

d. Reporting Requirements

The Permittee shall comply with the applicable coating reporting requirements pursuant to 40 CFR §63.753(c).

3. Handling and Storage of Waste

a. Limitation or Restriction

The Permittee shall comply with the applicable requirements for the handling and storage of waste pursuant to 40 CFR §63.748(a).

b. Monitoring Requirements

Record keeping specified in Section III.J.3.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.J.3.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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

K. GROUPED EMISSIONS UNIT 17 (GEU-17): Rentech Boilers 5 & 6, NSR Permit Nos. 104-0140 and 104-0141, 40 CFR Part 60 Subpart Dc, 40 CFR Part 63 Subpart DDDDD (Gas 1 Subcategory), RCSA §22a-174-22e

1. Fuel Use

a. Limitation or Restriction [P104-0140 and 104-0141]

- i. Fuel Types:

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- (A) Natural Gas
- (B) No. 2 Oil
- ii. Maximum Fuel Consumption of any Consecutive 12 Month Period: (Each Unit)
 - (A) Natural Gas: 425.6 million cubic feet
 - (B) No. 2 Oil: 1,457,217 gallons
- iii. Maximum Fuel Sulfur Content (% by weight, dry basis): 0.05
- iv. Maximum Fuel Firing Rate:
 - (A) Natural Gas: 48,580 cfh
 - (B) No. 2 Oil: 342 gph
- v. Maximum Gross Heat Input (MMBtu/hr): 48.58
- b. *Monitoring Requirements* [P104-0140 and 104-0141]

The Permittee shall use a non-resettable totalizing fuel metering device or a billing meter to continuously monitor natural gas and No. 2 oil feed to each unit in GEU-17.
- c. *Record Keeping Requirements*
 - i. The Permittee shall keep records of annual fuel consumption. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding (for each fuel) the current month's fuel usage to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0140 and 104-0141]
 - ii. The Permittee shall make and keep records of the sulfur content of each shipment of liquid fuel received at the Middletown plant, either by a shipping receipt and certification from the fuel supplier, or performing an analysis using the method found in ASTM D4294, or a copy of a current fuel supplier contract. Records for a fuel certification and analysis shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier, type or grade of fuel delivered, and the maximum percentage of sulfur in such fuel, by weight, dry basis. [P104-0140 and 104-0141; 40 CFR §60.42c(h)]
 - iii. The Permittee shall comply with the SO₂ standards based on the applicable fuel supplier certification pursuant to 40 CFR §60.48c(f). [40 CFR §60.44c(h)]
 - iv. The Permittee shall record and maintain records of the amount of fuel combusted during each calendar month. [40 CFR §60.48c(g)(2)]
- d. *Reporting Requirements*
 - i. The Permittee shall submit all applicable reports pursuant to 40 CFR §§60.48c(d) & (e).
 - 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

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2. Pollutant Emissions

a. Limitation or Restriction [P104-0140 and 104-0141]

- i. The Permittee shall not exceed the following emissions for each unit for either fuel (lb/hr):
 - (A) PM₁₀: 0.37
 - (B) SO₂: 2.36
 - (C) NO_x: 4.66
 - (1) 0.20 lb/MMBtu [RCSA §22a-174-22e(d)(3)(A)]
 - (D) VOC: 0.27
 - (E) CO: 3.63
 - (F) Pb: 2.43E-5
- ii. The Permittee shall not exceed the following emissions for each unit (tons/12 consecutive months):
 - (A) PM₁₀: 1.62
 - (B) SO₂: 5.24
 - (C) NO_x: 14.03
 - (D) VOC: 1.17
 - (E) CO: 11.89
 - (F) Pb: 1.06E-4

b. Monitoring Requirements [P104-0140 and 104-0141]

- i. The Permittee shall calculate the emissions in Part III.K.2 of this Title V permit from the following sources:
 - (A) Natural Gas
 - (1) PM₁₀, SO₂, VOC, Pb: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 1.4, July 1998
 - (B) No. 2 Oil
 - (1) PM₁₀, SO₂, VOC, Pb: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 1.3, July 1998
 - (C) CO (Both Fuels): Manufacturer's Data
 - (D) NO_x (Both Fuels): Latest Stack test data [RCSA §22a-174-22e(l)]
- ii. The Permittee shall conduct recurring NO_x testing pursuant to the following:
 - (A) On and After May 1, 2018, RCSA §22a-174-22e(l).

c. Record Keeping Requirements

- i. On and After May 1, 2018, the Permittee shall keep all applicable records pursuant to RCSA §22a-174-22e(j)(2)
- ii. The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.K.2.a of this Title V permit.

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[RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

i. On and After May 1, 2018:

- (A) The Permittee shall submit stack emission test results pursuant to RCSA §22a-174-22e(k)(1).
- ii. The Permittee shall submit all applicable reports pursuant to 40 CFR §60.48c(b).
- iii. 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

3. Opacity

a. Limitation or Restriction

i. The Permittee shall not cause to be discharged into the atmosphere from any gases that exhibit greater than:

(A) Twenty percent opacity (six-minute average), except for one 6-minute period per hour of not more than 27 percent opacity when combusting oil. [40 CFR §60.43c(c)]

(1) For the purposes of 40 CFR Part 60 Subpart Dc, the PM and opacity standards under 40 CFR §60.43c apply at all times when combusting oil, except during periods of startup, shutdown, or malfunction. [40 CFR §60.43c(d)]

(B) Twenty percent opacity during any six-minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9; or [RCSA §22a-174-18(b)(1)(A)]

(C) Forty percent opacity as measured by 40 CFR Part 60 Appendix A, Reference Method 9, reduced to a one-minute block average. [RCSA §22a-174-18(b)(1)(B)]

b. Monitoring Requirements

i. The Permittee shall comply with applicable procedures in 40 CFR §60.48c(c).

ii. Record keeping specified in Section III.K.3.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.K.3.a of this Title V permit.

[RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

i. The Permittee shall submit all applicable reports pursuant to 40 CFR §60.48c(b).

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

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4. National Emission Standards (NESHAP) for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, Gas 1 Subcategory

a. Limitation or Restriction

- i. The Permittee shall comply with the following work practice standards:
 - (A) Conduct a tune-up every five years as specified in 40 CFR §63.7540(a)(12). The tune-up shall include the following: [40 CFR §63.7540(a)(10)]
 - (1) Inspection of the burner, cleaning and replacement of any components of the burner, as necessary.
 - (2) Inspection of the flame pattern and adjustment of the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - (3) Inspection of the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
 - (4) Optimization of the total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available.
 - (5) Measurement of the concentrations in the effluent stream of CO in parts per million, by volume (ppmv) and oxygen in volume percent, before and after the adjustments are made.
- ii. The Permittee shall operate and maintain GEU-17 including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR §63.7500(a)(3)]

b. Monitoring Requirements

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

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the tune-ups including the following information:
[40 CFR §63.7540(a)(10)(vi)]
 - (A) The concentrations of CO in the effluent steam in parts per million by volume, and oxygen in volume percent, measured at high fire of typical operating load, before and after tune-up of GEU-17.
 - (B) A description of any corrective action taken as part of the tune-up.
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up.
- ii. The Permittee shall make and keep records sufficient to prove the energy assessment, required by 40 CFR §63.7500(a)(1), Table 3, Item 4, was completed including the date on which such energy assessment was conducted. [RCSA §22a-174-33(j)(1)(K)]
- iii. The Permittee shall make and keep all applicable records pursuant to 40 CFR §63.7555(a).
- iv. The Permittee shall make and keep records of the total hours per calendar year that alternative fuel is burned and total hours per calendar year that each unit in GEU-17 operated during periods of curtailment or gas supply emergencies. [40 CFR §63.7555(h)]

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d. Reporting Requirements

- i. The Permittee shall submit a five year compliance report in accordance with 40 CFR §§63.7550(b)(1) through (b)(4). The compliance report must contain the following information:
[40 CFR §63.7550(c)]
 - (A) Company and Facility name and address
 - (B) Process unit information, emissions limitations, and operating parameter limitations.
 - (C) Date of report and beginning and ending dates of the reporting period.
 - (D) Include the date of the most recent tune-up for each unit and the date of the most recent burner inspection if it was not done on a five year period and was delayed until the next scheduled or unscheduled unit shutdown.
 - (E) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

L. EMISSIONS UNIT 18 (EU-18): Solar Taurus 70 Gas Turbine, Permit No. 104-0142, 40 CFR Part 60 Subpart KKKK, 40 CFR Part 63 Subpart YYYY, RCSA §22a-174-22e

1. Fuel Use

a. Limitation or Restriction [P104-0142]

- i. Allowable Fuels: Natural Gas and No. 2 Oil
- ii. Maximum Fuel Firing Rate:
 - (A) Natural Gas: 82,884 cfh @ ISO Standard Conditions
 - (B) No. 2 Oil: 539.1 gph @ ISO Standard Conditions
- iii. Maximum Heat Input (MMBtu/hr):
 - (A) Both Fuels: 82.88 @ ISO Standard Conditions
- iv. Maximum Fuel Consumption over any Consecutive 12 Month Period
 - (A) Natural Gas: 726.06 million cubic feet
 - (B) No. 2 Oil: 539,140 gallons
- v. No. 2 Oil Sulfur Content (% by weight, dry basis): 0.05

b. Monitoring Requirements

- i. The Permittee shall use a non-resettable totalizing fuel metering device or a billing meter to continuously monitor natural gas and No. 2 oil feed to EU-18. [P104-0142]
- ii. Record keeping specified in Section III.L.1.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.
[RCSA §22a-174-33(j)(1)(K)]

c. Record Keeping Requirements [P104-0142]

- i. The Permittee shall keep records of annual fuel consumption. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding (for each fuel) the current month's fuel usage to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.

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- ii. The Permittee shall make and keep records of the sulfur content of each shipment of liquid fuel received at the Middletown plant, either by (1) a shipping receipt and certification from the fuel supplier, or (2) performing an analysis using the method found in ASTM D4294, or (3) a copy of a current fuel supplier contract. Records for a fuel certification and analysis shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier, type or grade of fuel delivered and the maximum percentage of sulfur in such fuel, by weight, dry basis.

d. Reporting Requirements

- i. The Permittee shall submit all applicable reports pursuant to 40 CFR §60.4375(a).
- ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier.

[RCSA §22a-174-33(j)(1)(X)]

2. Pollutant Emissions

a. Limitation or Restriction [P104-0142]

- i. The Permittee shall not exceed the following emission limits for EU-18:
(ppmvd @ 15% O₂ and ISO Standard Conditions)
 - (A) NO_x:
 - (1) Natural Gas: 2.5
 - (2) No. 2 Oil: 9.6
 - (B) CO: 50 (Both Fuels)
 - (C) SO₂: 0.060 lb/MMBtu [40 CFR §60.4330(a)(2)]
 - (D) Ammonia: 5
- ii. The Permittee shall not exceed the following emissions for EU-18: (tons/12 consecutive months):
 - (A) PM₁₀: 2.58
 - (B) SO₂: 2.00
 - (C) NO_x: 5.16
 - (D) VOC: 14.10
 - (E) CO: 48.76
 - (F) Pb: 5.28E-4
- iii. This equipment shall not cause an exceedance of the MASC for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. **[STATE ONLY REQUIREMENT; P104-0142]**

b. Monitoring Requirements [P104-0142]

- i. The Permittee shall calculate the emissions in Part III.L.2 of this Title V permit from the following sources:

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(A) Both Fuels

- (1) PM₁₀, SO₂, VOC, Pb, HAP: Compilation of Air Pollutant Emission Factors, AP-42, fifth edition, Section 3.1, April 2000
- (2) NO_x, CO, Ammonia: Manufacturer's data

ii. The Permittee shall conduct the following recurring stack testing for the following pollutants:

(A) NO_x Emissions

- (1) On and after May 1, 2018, RCSA §22a-174-22e(l).
- (2) For the purposes of 40 CFR Part 60 Subpart KKKK, continuous compliance for NO_x may be demonstrated through annual performance tests in accordance with 40 CFR §60.4400. If the NO_x emission result from the performance test is less than or equal to 75% of the NO_x emission limits in Table 1 of 40 CFR Part 60 Subpart KKKK for the turbine, the frequency of subsequent performance tests may be reduced to once every two years.

(B) Ammonia:

The Permittee shall conduct stack emissions testing for ammonia every four years from the date of the initial performance test.

c. *Record Keeping Requirements*

- i. On and After May 1, 2018, the Permittee shall keep all applicable records pursuant to RCSA §22a-174-22e(j)(2).
- ii. The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.L.2.a of this Title V permit.

[RCSA §22a-174-33(j)(1)(K)]

d. *Reporting Requirements*

- i. On and after May 1, 2018:
 - (A) The Permittee shall submit stack emission test results pursuant to RCSA §22a-174-22e(k)(1).
 - (B) The Permittee shall submit all applicable stack test reports pursuant to 40 CFR §60.4375(b).
 - (C) 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

3. Work Practice Standards

a. *Limitation or Restriction*

- i. The Permittee shall operate and maintain EU-18, air pollution control equipment, and monitoring equipment in a manner consistent with good engineering control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [40 CFR §60.4315(a)]
- ii. The Permittee shall properly operate the control equipment at all times that EU-18 is in operation and emitting air pollutants. [P104-0142]
- iii. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [P104-0142]
- iv. The Permittee shall inspect the SCR catalyst once per year, at a minimum, and replace it as required through the monitoring of the catalyst test pieces. [P104-0142]

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b. Monitoring Requirements

Record keeping specified in Section III.L.3.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.L.3.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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

M. EMISSIONS UNIT 19 (EU-19): Cleaver Brooks D-68 Boiler, 40 CFR Part 63 Subpart DDDDDD (Limited Use Subcategory), Permit No. 104-0036, RCSA §22a-174-22e

1. Fuel Use

a. Limitation or Restriction [P104-0036]

i. Fuel Types:

(A) No. 2 Fuel Oil

(B) ULSD

ii. Maximum Fuel Consumption over any Consecutive 12 Month Period:

(A) ULSD: 299,592 gallons

iii. Maximum Fuel Sulfur Content (% by weight, dry basis):

(A) On and After July 1, 2018

(1) 0.0015

iv. Maximum Fuel Firing Rate (gal/hr): 342

v. Maximum Gross Heat Input (MMBtu/hr): 47.88

b. Monitoring Requirements [P104-0036]

The Permittee shall use a non-resettable totalizing fuel metering device or a billing meter to continuously monitor No. 2 fuel oil/ULSD feed to EU-19.

c. Record Keeping Requirements [P104-0036]

i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.

ii. The Permittee shall make and keep records of the sulfur content of each shipment of liquid fuel received at the Middletown plant, either by a shipping receipt and certification from the fuel supplier, or performing an analysis using the method found in ASTM D4294, or a copy of a current fuel supplier

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contract. Records for a fuel certification and analysis shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier, type or grade of fuel delivered, and the maximum percentage of sulfur in such fuel, by weight, dry basis.

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

2. Pollutant Emissions

a. Limitation or Restriction [P104-0036]

i. The Permittee shall not exceed the following emissions for each unit for either fuel (lb/hr):

- (A) PM: 0.34
- (B) PM₁₀: 0.34
- (C) PM_{2.5}: 0.34
- (D) SO₂: 2.43
- (E) NO_x: 6.84
 - (1) NO_x: 0.20 lb/MMBtu
- (F) VOC: 0.07
- (G) CO: 1.71
- (H) Pb: 4.31E-4

ii. The Permittee shall not exceed the following emissions for each unit (tons/12 consecutive months):

- (A) PM: 0.15
- (B) PM₁₀: 0.15
- (C) PM_{2.5}: 0.15
- (D) SO₂: 1.06
- (E) NO_x: 3.0
- (F) VOC: 0.03
- (G) CO: 0.75
- (H) Pb: 1.89E-4

iii. This equipment shall not cause an exceedance of the MASC for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. **[STATE ONLY REQUIREMENT; P104-0142]**

b. Monitoring Requirements

i. The Permittee shall calculate the emissions in Part III.M.2.a of this Title V permit from the following sources: [P104-0036]

- (A) PM, PM₁₀, PM_{2.5}, SO₂, CO, VOC, Pb, HAPs: Compilation of Air Pollutant Emission Factors,

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- (B) NOx: Latest Stack test data
- ii. The Permittee shall conduct recurring NOx testing pursuant to the following:
 - (A) On and after May 1, 2018, RCSA §22a-174-22e(l).
- c. *Record Keeping Requirements*
 - i. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM₁₀, PM_{2.5}, SO₂, NOx, VOC, and CO emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0036]
 - ii. On and After May 1, 2018, the Permittee shall keep all applicable records pursuant to RCSA §22a-174-22e(j)(2)
- d. *Reporting Requirements*
 - i. On and After May 1, 2018:
 - (A) The Permittee shall submit stack emission test results pursuant to RCSA §22a-174-22e(k)(1).
 - 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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

3. Opacity

- a. *Limitation or Restriction* [P104-0036]

EU-19 shall not exceed 20% opacity during any six minute block average as measured by 40 CFR Part 60, Appendix A, Reference 9.
- b. *Monitoring Requirements*

Record keeping specified in Section III.M.3.c of this Title V permit shall be sufficient to meet other Monitoring requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]
- c. *Record Keeping Requirements*

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.M.3.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 specific by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

4. National Emission Standards (NESHAP) for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, Limited-Use Subcategory

- a. *Limitation or Restriction*

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- i. The Permittee shall comply with the following work practice standards:
 - (A) Conduct a tune-up every five years as specified in 40 CFR §63.7540(a)(12). The tune-up shall include the following:

[40 CFR §63.7540(a)(10)]

 - (1) Inspection of the burner, cleaning and replacement of any components of the burner, as necessary.
 - (2) Inspection of the flame pattern and adjustment of the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - (3) Inspection of the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
 - (4) Optimization of the total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available.
 - (5) Measurement of the concentrations in the effluent stream of CO in parts per million, by volume (ppmv) and oxygen in volume percent, before and after the adjustments are made.
 - ii. The Permittee shall operate and maintain EU-19 including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR §63.7500(a)(3)]
- c. *Record Keeping Requirements*
 - i. The Permittee shall make and keep records of the tune-ups including the following information:

[40 CFR §63.7540(a)(10)(vi)]

 - (A) The concentrations of CO in the effluent steam in parts per million by volume, and oxygen in volume percent, measured at high fire of typical operating load, before and after tune-up of EU-19.
 - (B) A description of any corrective action taken as part of the tune-up.
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up.
 - ii. The Permittee shall make and keep records sufficient to prove the energy assessment, required by 40 CFR §63.7500(a)(1), Table 3, Item 4, was completed including the date on which such energy assessment was conducted. [RCSA §22a-174-33(j)(1)(K)]
 - iii. The Permittee shall make and keep all applicable records pursuant to 40 CFR §63.7555(a).
- d. *Reporting Requirements*
 - i. The Permittee shall submit a five year compliance report in accordance with 40 CFR §§63.7550(b)(1) through (b)(4). The compliance report must contain the following information:

[40 CFR §63.7550(c)]

 - (A) Company and Facility name and address
 - (B) Process unit information, emissions limitations, and operating parameter limitations.
 - (C) Date of report and beginning and ending dates of the reporting period.
 - (D) Include the date of the most recent tune-up for each unit and the date of the most recent burner inspection if it was not done on a five year period and was delayed until the next scheduled or

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unscheduled unit shutdown.

- (E) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

N. PREMISES-WIDE GENERAL REQUIREMENTS

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

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compound emissions as set forth in RCSA §22a-174-20.

16. **Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22e.
17. **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).
18. **Open Burning:** The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
19. **Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
20. **VOC RACT:** The Permittee shall comply with the standards for Reasonably Available Control Technology (RACT) for volatile organic compounds as set forth in RCSA §22a-174-32 by complying with the Control Technology Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004).
21. **VOC Emissions from Miscellaneous Metal Parts Surface Coating Operations:** The Permittee shall comply with the premises-wide VOC emissions limitation as set forth in New Source Review permits 104-0073 Parts D & F, 104-0126 Parts IV.B & III.A.2 & 3, and 104-0139 Parts VI.B & IV.A.2 & 3.
22. **Small Steam Generating Unit NSPS:** The Permittee shall comply with the New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units as specified in 40 CFR 60, Subpart Dc.
23. **Stationary Combustion Turbines NSPS:** The Permittee shall comply with the New Source Performance Standards for Stationary Combustion Turbines as specified in 40 CFR 60, Subpart KKKK.
24. **Stationary Combustion Turbines NESHAP:** The Permittee shall comply with the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines as specified in 40 CFR 63, Subpart YYYYY.
25. **Aerospace NESHAP:** The Permittee shall comply with the National Emission Standards for Hazardous Air Pollutants for Aerospace Manufacturing and Rework Facilities as specified in 40 CFR 63, Subpart GG.
26. **Asbestos NESHAP:** The Permittee shall comply with the National Emission Standards for Hazardous Air Pollutants for Asbestos as specified in 40 CFR 61, Subpart M.
27. **Site Remediation:** The Permittee shall comply with the National Emission Standards for Hazardous Air Pollutants for Site Remediation one megagram exemption record keeping requirements, as specified in 40 CFR 63, Subpart GGGGG.
28. **Protection of Stratospheric Ozone:** The Permittee shall comply with the standards for recycling and emissions reduction of products using ozone depleting substances.

Section IV: Compliance Schedule

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

Section V: State Enforceable Terms and Conditions

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

SECTION V: STATE ENFORCEABLE TERMS AND CONDITIONS

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

Section V: State Enforceable Terms and Conditions

- F.** Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- G.** The Permittee shall comply with the requirements for Architectural and Industrial Maintenance Coatings as set forth in RCSA §22a-174-41.
- H.** 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: Office of the Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the Environmental Protection Agency shall be in a computer-readable format and addressed to: U.S. EPA New England, 5 Post Office Square, Suite 100 (OES04-2), Boston, Massachusetts 02109, Attn: Air Clerk.

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

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

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

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

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

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

Section VI: Title V Requirements

4. Impose limits on emissions from items or activities specified in RCSA §§22a-174-33(g)(3)(A) and -33(g)(3)(B) unless imposition of such limits is required by an applicable requirement.

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

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

N. PERMIT AVAILABILITY

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

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

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

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

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

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

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

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

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

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

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

Section VI: Title V Requirements

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

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

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

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

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

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

V. TRANSFERS [RCSA §22a-174-2a(g)]

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

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

W. REVOCATION [RCSA §22a-174-2a(h)]

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

Section VI: Title V Requirements

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

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

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

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

Y. CREDIBLE EVIDENCE

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