



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	<i>092-0027-TV</i>
Client/Sequence/Town/Premises Numbers	<i>8697/1/92/2</i>
Date Issued	July 21, 2016
Minor Modification Date Issued	July 17, 2019
Expiration Date	July 21, 2021

Corporation:

Americas Styrenics LLC, Allyn's Point

Premises Location:

1761 Route 12, Gales Ferry, CT 06335

Name of Responsible Official and Title:

Steven G. Lake, Plant Manager

All the following attached pages, 2 through 44, are hereby incorporated by reference into this Title V permit.

/s/Tracey Babbidge for
Betsey C. Wingfield
Deputy Commissioner

7/17/2019
Date

TABLE OF CONTENTS

	PAGE
Section I. Premises Information/Description	
A. Premises Information.....	6
B. Premises Description.....	6
Section II. Emissions Units Information	
A. Emissions Units Description - Table II.A.....	8
B. Operating Scenario Identification - Table II.B.....	11
Section III. Applicable Requirements and Compliance Demonstration	
A. Emissions Unit 1.....	12
B. Grouped Emissions Unit 1.....	17
C. Grouped Emissions Unit 3.....	24
D. Grouped Emissions Unit 4.....	28
E. Emissions Unit 5.....	29
F. Emissions Unit 2.....	30
G. Grouped Emissions Unit 6.....	31
H. Premises-Wide General Requirements.....	33
Section IV. Compliance Schedule - Table IV.....	35
Section V. State Enforceable Terms and Conditions.....	36
Section VI. Title V Requirements	
A. Submittals to the Commissioner & Administrator.....	38
B. Certifications [RCSA §22a-174-33(b)].....	38
C. Signatory Responsibility [RCSA §22a-174-2a(a)].....	38
D. Additional Information [RCSA §§22a-174-33(j)(1)(X), -33(h)(2)].....	39
E. Monitoring Reports [RCSA §22a-174-33(o)(1)].....	39
F. Premises Records [RCSA §22a-174-33(o)(2)].....	40
G. Progress Reports [RCSA §22a-174-33(q)(1)].....	40
H. Compliance Certifications [RCSA §22a-174-33(q)(2)].....	41
I. Permit Deviation Notifications [RCSA §22a-174-33(p)].....	41
J. Permit Renewal [RCSA §22a-174-33(j)(1)(B)].....	41
K. Operate in Compliance [RCSA §22a-174-33(j)(1)(C)].....	41
L. Compliance with Permit [RCSA §22a-174-33(j)(1)(G)].....	41
M. Inspection to Determine Compliance [RCSA §22a-174-33(j)(1)(M)].....	42
N. Permit Availability.....	42
O. Severability Clause [RCSA §22a-174-33(j)(1)(R)].....	42
P. Need to Halt or Reduce Activity [RCSA §22a-174-33(j)(1)(T)].....	42
Q. Permit Requirements [RCSA §22a-174-33(j)(1)(V)].....	42
R. Property Rights [RCSA §22a-174-33(j)(1)(W)].....	42
S. Alternative Operating Scenario Records [RCSA §22a-174-33(o)(3)].....	42
T. Operational Flexibility and Off-Permit Changes [RCSA §22a-174-33(r)(2)].....	43
U. Information for Notification [RCSA §22a-174-33(r)(2)(A)].....	43
V. Transfers [RCSA §22a-174-2a(g)].....	43
W. Revocation [RCSA §22a-174-2a(h)].....	43
X. Reopening for Cause [RCSA §22a-174-33(s)].....	44
Y. Credible Evidence.....	44

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>
°F	Degrees Fahrenheit
ASC	Allowable Stack Concentration
As	Arsenic
AWFCO	Automatic Waste Feed Cut-Off
Be	Beryllium
Cd	Cadmium
CEMS	Continuous Emissions Monitoring System
CMS	Continuous Monitoring System
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
Cl ₂	Chlorine
CO	Carbon Monoxide
Co	Cobalt
CPT	Comprehensive Performance Test
CPTA	Comprehensive Performance Test Average
CPTM	Comprehensive Performance Test Maximum
Cr	Chromium
DOT	Department of Transportation
DRE	Destruction and Removal Efficiency
dscm	Dry Standard Cubic Meters
EU	Emissions Unit
EPA	Environmental Protection Agency
FAP	Feedstream Analysis Plan
g	Gram
gpm	Gallons per minute
gmole	Gram-Mole
GEU	Grouped Emissions Units
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
HRA	Hourly Rolling Average
hr	Hour
kg	Kilograms
lb	Pound
LDAR	Leak Detection and Repair
MACT	Maximum Achievable Control Technology
MHWTC	Maximum Hazardous Waste Thermal Concentration
min	Minute
MMBtu	Million British Thermal Units
mmHg	Millimeters of Mercury
Mn	Manganese
MS	Manufacturer's Specifications
Ni	Nickel
NOC	Notification of Compliance
NO _x	Nitrogen Oxides
NSR	New Source Review
O ₂	Oxygen
OMP	Operation and Maintenance Plan

LIST OF ABBREVIATIONS/ACRONYMS, continued

<i>Abbreviation/Acronym</i>	<i>Description</i>
Pb	Lead
PEP	Performance Evaluation Plan
PM	Particulate Matter
POHC	Principal Organic Hazardous Constituent
ppm	Parts Per Million
ppmvd	Parts Per Million, Volumetric Basis Dry
psig	Pound-Force Per Square Inch Gauge
RCSA	Regulations of Connecticut State Agencies
RICE	Reciprocating Internal Combustion Engine
scm	Standard Cubic Meters
Sb	Antimony
Se	Selenium
SIC	Standard Industrial Classification Code
SSMP	Startup, Shutdown and Maintenance Plan
TPPU	Thermoplastic Product Process Unit
TSP	Total Suspended Particulate
ULSD	Ultra Low Sulfur Diesel
VOC	Volatile Organic Compound

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Polymer production

Primary SIC: 2821

Facility Mailing Address: 1761 Route 12, Gales Ferry, CT 06335

Telephone Number: (860) 447-7298

B. PREMISES DESCRIPTION

Americas Styrenics, LLC (AmSty) is located at 1761 Route 12, Gales Ferry, CT. The premises is called the Allyn's Point site by AmSty. AmSty is a Title V source located in a serious ozone non-attainment area defined in RCSA §22a-174-1. **The premises is major for HAPs.**

AmSty consists of two operating departments: the E Train and the G Train both of which share common equipment and processes. Both E Train and G Train produce polymer using styrene monomer. E Train also produces polymer using styrene monomer and post-consumer recycled polystyrene. Additionally, diluents and additives such as organic feedstock, and small quantities of solid additives vary the characteristics of the polymers. The manufacturing process consists of a continuous feed of raw materials to the reactor where polymerization occurs. Unreacted raw materials are removed from the products and recycled back into the process. The finished product is extruded, cooled, and pelletized prior to being transferred to the product silos for storage.

AmSty also operates a Styrene loading terminal that is subject to 40 CFR Part 63 Subpart EEEE (National Emissions Standards for Hazardous Air Pollutants for Major Sources: Organic Liquids Distribution (Non-Gasoline)). The Styrene loading terminal is not subject to the New Source Review Program.

Additionally, AmSty operates Dowtherm Heater A, Dowtherm Heater B, an emergency diesel engine, one emergency fire pump engine and product storage silos, along with a significant number of other emissions units that are exempt from permitting requirements.

There are also six Styrene storage tanks. In accordance with 40 CFR §63.1314(d), the styrene storage tanks are exempted from the requirements of 40 CFR Part 63 Subpart JJJ. The Styrene storage tanks are part of the Subpart JJJ affected source as determined under 40 CFR §63.1310(g), and are not regulated by 40 CFR Part 63 Subpart EEEE as provided in 40 CFR §63.2338(c)(1). The Styrene storage tanks are not subject to the requirements of RCSA §22a-174-3a.

AmSty is subject to:

- 40 CFR Part 63 Subpart JJJ: National Emission Standards for Hazardous Air Pollutants Emissions: Group IV Polymers and Resins. Certain provisions from 40 CFR Part 63 Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks) and 40 CFR Part 63 Subpart G (National Emission Standards for Organics Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater) applies via references in Subpart JJJ
- 40 CFR Part 63 Subpart EEE: National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustor
- 40 CFR Part 63 Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine
- 40 CFR Part 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters
- 40 CFR Part 63 Subpart EEEE: National Emissions Standards for Hazardous Air Pollutants for Major Sources: Organic Liquids Distribution (Non-Gasoline)

Section I: Premises Information/Description

Note: Premises History:

Dow Chemical Company owned the premises until 2008. During that time the premises was a major source of HAPs on the first compliance date for several National Emission Standards for Hazardous Air Pollutants (NESHAPs), including 40 CFR Part 63 Subpart JJJ and Subpart EEE, therefore the premises remains subject to the NESHAP rule under 40 CFR §63.1(c)(1). Title V applicability follows the applicability of 40 CFR Part 63 Subpart JJJ and Subpart EEE.

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 Regulations into this Title V permit.

TABLE II.A: EMISSIONS UNITS DESCRIPTION			
Emissions Unit/Grouped Emissions Unit	Emissions Unit Description	Control Unit Description	Regulation Number
EU-1	Dowtherm Heater A: Hazardous Waste Incinerator	None	40 CFR Part 63 Subpart EEE
E Train & G Train	EU-1A1	E Train 1 st Devo Condenser (E615)	Dowtherm Heaters A and B (GEU-1 may vent to EU-1 and EU-2)
	EU-1A2	G Train 1 st Devo Condenser (V2430)	
	EU-1B1	E Train Rxts (R404, R405, R403, R401 and R402)	
	EU-1B2	G Train Primary Reactor (R2200)	
	EU-1C1	E Train Devolatizers (V501, V550)	
	EU-1C2	G Train Devolatizers (V2410, V2420)	
	EU-1D	E Train Knock Out Tank (V603)	
	EU-1E1	E Train Vacuum Flush Tank (V615)	
	EU-1E2	G Train Recycle Tanks (V2451)	
	EU-1F1	E Train Recycle Tanks (V108, V109)	
	EU-1F2	G Train Recycle Tanks (V1156 – two compartment tank)	
	EU-1G	Ethyl Benzene Tank (V106)	
	EU-1K	Dissolvers (V213, V 215)	
	EU-1L	G Train Bluetone Tank (V2125)	
	EU-1M	G Train Knock Out Tank (V2425)	
EU-1N	Alternative Fuel Tank (V1910)		
EU-1O	E Train Blowdown Tank (V434)	40 CFR Part 63 Subpart JJJ	
			RCSA §§22a-174-20 (a), (x) and (y)

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION			
Emissions Unit/Grouped Emissions Unit	Emissions Unit Description	Control Unit Description	Regulation Number
GEU-1 E Train & G Train	EU-1P	G Train Blowdown Tank (V2400)	Dowtherm Heaters A and B (GEU-1 may vent to EU-1 and EU-2) 40 CFR Part 63 Subpart JJJ RCSA §§22a-174-20 (a), (x) and (y)
	EU-1Q1	E Train Feed Filters (FL671, FL672)	
	EU-1Q2	G Train Feed Filters (FL2100A, FL2100B)	
	EU-1R	E Train Recycle to Train Filter (FL112)	
	EU-1S	G Train 1 st Devo Condenser Receiver (V2431)	
	EU-1T	E Train Final condenser Recycle Receiver (V604)	
	EU-1U	G Train Vacuum Flush Heat Exchanger (E2452)	
	EU-1V	G Train Recycle De-Superheater (E2451)	
	EU-1W	G Train Reflux Condenser (E2200)	
	EU-1X	E Train Feed Preheater (E326)	
	EU-1Y	E Train 2 nd Devo Condensers (E601, E604, E607)	
	EU-1Z	G Train 2 nd Devo Condensers (E2325, E2435)	
	EU-1AA	E Train Devo FPH (PE505, PE551)	
	EU-1BB	VRCS Knockout Pot (D101)	
	EU-1CC	Mercaptan Feed Tank (V326)	
	EU-1DD	Zinc Stearate Mix Tank (V2825B)	
	EU-1EE	Zinc Stearate Mix Tank (V2825A)	
	EU-1FF	G Train Seal Flush Tank (V2201)	
	EU-1GG	G Train Extrusion Dies (3)	
	EU-1HH	G Train Pelletizers (3)	
EU-1JJ	E Train Extrusion Dies (2)		
EU-1KK	E Trail Pelletizers (2)		

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit/Grouped Emissions Unit	Emissions Unit Description	Control Unit Description	Regulation Number	
GEU-1 E Train & G Train	EU-1LL	E Train Demister (ME804)	Dowtherm Heaters A and B (GEU-1 may vent to EU-1 and EU-2) LDAR None None None None None None None None None None	
	EU-1MM	G Train Demister (ME1603)		
	EU-1NN	Vacuum Seal Fluid Exchanger (E912)		
	EU-1OO	Vacuum Heat Exchangers (E803A, E803B)		
	EU-1PP	PCR Slurry Feed Tank (V107)		
	EU-1QQ	PCR Slurry Filters (FL220, F230)		
	EU-1ELF	Equipment Leak Components		
	EU-1-D1	Styrene Storage Tank – D1		
	EU-1-D2	Styrene Storage Tank – D2		
	EU-1-D3	Styrene Storage Tank – D3		
	EU-1-D26	Styrene Storage Tank – D26		
	EU-1-D36	Styrene Storage Tank – D36		
EU-1-D37	Styrene Storage Tank – D 37			
EU-2	Dowtherm Heater B ⁽¹⁾	None	40 CFR Part 63 Subpart DDDDD	
GEU-3	EU-3A	Detroit Diesel Emergency Generator 2,340 BHP(16.7 MMBtu/hr)	None	RCSA §22a-174-3b(e) RCSA §22a-174-22f 40 CFR Part 63 Subpart ZZZZ
	EU-3B	Building 41 Clarke Model JU6H (with a John Deere base engine) Fire Pump Engine Model 149 BHP (1.31 MMBtu/hr)	None	RCSA §22a-174-3b(e) RCSA §22a-174-22f 40 CFR Part 60 Subpart III
GEU-4 Silos	EU-4A	E Train Finished Product Storage Silo System 1	Particulate Air Filter	RCSA §22a-174-18(f)
	EU-4B	E Train Finished Product Storage Silo System 3		
	EU-4C	G Train Finished Product Storage Silo System 4		
	EU-4D	E Train Finished Product Storage Silo System 5		
	EU-4E	G Train Finished Product Storage Silo System 6		
	EU-4F	E Train Finished Product Storage Silo System 7		
	EU-4G	E Train Finished Product Storage Silo System Take Away		

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit/Grouped Emissions Unit	Emissions Unit Description	Control Unit Description	Regulation Number	
	EU-4GA	E Train Finished Product Storage Rework System Vacuum Blower		
	EU-4H	G Train Finished Product Storage Silo System 9		
	EU-4I	G Train Finished Product Storage Silo System 10		
	EU-41A	G Train Finished Product Storage Rework System 16 A & 16 B		
	EU-4J	PCT Raw Material Storage Silo System 20		
EU-5	Parts Washer	None	RCSA §22a-174-20(l)	
GEU-6 Styrene Loading Terminal	EU-6A	Styrene Loading Rack	Dowtherm Heaters A and B	40 CFR Part 63 Subpart EEEE
	EU-6B	Styrene Transport Vehicles	None	
	EU-6C	Styrene Loading Equipment Leak Components	LDAR	

- (1) Dowtherm Heater B burns natural gas and vapors from the facility’s process tanks due to working and breathing losses from the tanks and venting of the cargo trucks during loading of Styrene. The vapors burned in Dowtherm Heater B enter with the combustion air blower. The primary purpose of the combustion air blower is providing oxygen necessary for combustion of the natural gas.

B. OPERATING SCENARIO IDENTIFICATION

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

TABLE II.B: OPERATING SCENARIO IDENTIFICATION	
Emissions Unit/Grouped Emissions Unit Associated with the Scenario	Description of Scenario
GEU-1, GEU-4, EU-1, EU-2, EU-5	Polystyrene Resin Production
GEU-3	Provide Emergency Power
GEU-6	Styrene Loading Terminal

Section III: Applicable Requirements and Compliance Demonstration

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

A. EMISSIONS UNIT 1 (EU-1): EU-1 - Dowtherm Heater A

1. 40 CFR Part 63 Subpart EEE: National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors

a. Limitation or Restriction

- i. The emission limits and operating requirements set forth in 40 CFR Part 63 Subpart EEE and Section III.A.1 of this Title V permit shall apply at all times **except**:

(A) During periods of startup, shutdown, and malfunction; and

(B) When hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to EU-1 has been cut off for a period of time not less than the hazardous waste residence time) and the Permittee has documented in the operating record that the Permittee is complying with all otherwise applicable requirements and standards promulgated under authority of sections 112 or 129 of the Clean Air Act in lieu of the emission standards under 40 CFR §§63.1203, 63.1204, 63.1205, 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220, and 63.1221; the monitoring and compliance standards of 40 CFR §§63.1206 through 63.1209, except the modes of operation requirements of 40 CFR §63.1209(q); and the notification, reporting, and record keeping requirements of 40 CFR §§63.1210 through 63.1212. [40 CFR §63.1206(b)(1)]

- ii. Emission Limits [40 CFR §63.1217(a)]

The Permittee shall not discharge or cause combustion gases to be emitted into the atmosphere that exceed the following limits **except** as provided in 40 CFR §§63.1206(b)(1)(i) and (ii):

Pollutant	Shall Not Exceed...
Mercury	4.2 E-05 lb/MMBtu on an (not-to-exceed) annual averaging period.
PM	Comply with Alternative PM Standard at 40 CFR §63.1217(e). Must not exceed semi-volatile metals and low volatile metals emissions limits below.
HCl and Cl₂	5.1 E-02 lb/MMBtu combined
Carbon Monoxide	100 ppmvd, corrected to 7% O ₂ over an hourly rolling average.
Total Hydrocarbons	10 ppmvd, corrected to 7% O ₂ , and reported as propane, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system) demonstrated during the DRE test runs or their equivalent as provided by 40 CFR §63.1206(b)(7).
Semi-Volatile Metals (Pb, Cd, Se)	8.2 E-05 lb/MMBtu combined
Low Volatile Metals (Cr, Sb, As, Be, Co, Mn, Ni)	1.3 E-04 lb/MMBtu combined

- iii. Destruction and Removal Efficiency (DRE) [40 CFR §63.1217(c)]

(A) The Permittee shall achieve a DRE of 99.99% for each Principal Organic Hazardous Constituent (POHC) designated under Section III.A.1.a.iv.(B) of this Title V permit. The Permittee shall calculate DRE for each POHC from the following equation:

Section III: Applicable Requirements and Compliance Demonstration

$$DRE = [1 - (W_{out}/W_{in})] \times 100\%$$

Where:

W_{in} = mass feedrate of one POHC in a waste feed stream; and

W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

- (B) The Permittee must treat the POHCs in the waste feed that the Permittee specifies under Section III.A.1.a.iv.(C) of this Title V permit to the extent required in Section III.A.1.a.iv.(A) of this Title V permit.
- (C) The Permittee must specify one or more POHCs that are representative of the most difficult to destroy organic compounds in the Permittee's waste feedstream. The Permittee must base this specification on the degree of difficulty of incineration of the organic constituents in the hazardous waste and on their concentration or mass in the hazardous waste feed, considering the results of hazardous waste analyses or other data and information.

iv. Operating Parameter Limits [40 CFR §63.1206(c)(1)]

For the purposes of ensuring compliance with the emission limits in Section III.A.1.a.iii of this Title V permit, the following operating parameter limits were established during the comprehensive performance test (CPT), or are based on manufacturer's recommendations, and are contained in the Permittee's notification of compliance (NOC) dated June 23, 2010:

Operating Parameter	Units	Test Condition 1	Test Condition 2	Limit Basis	Averaging Basis	MACT Limit and AWFCO Limit
Maximum Total Hazardous Waste Feedrate	lb/hr	54.8	386	CPTM	HRA	386
Maximum Production Rate	MMBtu/hr	2.32	8.84	CPTM	HRA	8.84
Minimum Combustion Chamber Temperature	°F	958	1333	CPTA	HRA	958
Combustion Chamber Pressure	Combustion chamber is completely sealed					N/A
Minimum Atomization Air Pressure	psig	39.3	95.1	MS	Instantaneous	20
Maximum Stack CO Concentration	ppmvd @ 7% O ₂	13.7	17.6	MACT Limit	HRA	100

Section III: Applicable Requirements and Compliance Demonstration

Operating Parameter	Units	Test Condition 1	Test Condition 2	Limit Basis	Averaging Basis	MACT Limit and AWFCO Limit
Mercury MHWTC	lb/MMBtu	--	<1.3E-07	MACT Limit	HRA	4.2E-05
Semivolatile Metals MHWTCs	lb/MMBtu	--	<1.7E-06	MACT Limit	HRA	8.2E-05
Low Volatile Metals MHWTCs	lb/MMBtu	--	<5.7E-06	MACT Limit	HRA	1.3E-04
HCl and Cl ₂ MHWTC	lb/MMBtu	--	<8.39E-03	MACT Limit	HRA	5.1E-02

AWFCO = Automatic Waste Feed Cut-Off

CPTA = Established during the CPT as the average of the test run averages

CPTM = Established during the CPT as the average of the maximum HRA for each test run

HRA = Hourly Rolling Average

MS = Manufacturer's Specifications

MHWTC = Maximum Hazardous Waste Thermal Concentration

v. Automatic Waste Feed Cutoff (AWFCO) [40 CFR §63.1206(c)(3)]

(A) The Permittee shall operate EU-1 with a functioning AWFCO system, in accordance with all applicable requirements of 40 CFR §63.1206(c)(3), that immediately and automatically cuts off the hazardous waste feed, except as provided in 40 CFR §63.1206(c)(3)(viii):

- (1) when operating parameter limits in Section III.A.1.a.iv of this Title V permit are exceeded; or
- (2) when emission standards monitored by a Continuous Emissions Monitoring System (CEMS) are exceeded; or
- (3) when the span value of any Continuous Monitoring System (CMS) detector, except a CEMS, is met or exceeded; or
- (4) upon malfunction of a CMS monitoring an operating parameter limit in Section III.A.1.a.iv of this Title V permit or an emission level; or
- (5) when any component of the automatic waste feed cutoff system fails.

(B) The Permittee shall operate the AWFCO at all times when hazardous waste is in the combustion chamber.

b. *Monitoring Requirements and Testing Requirements*

- i. The Permittee shall develop a written Startup, Shutdown, and Malfunction Plan (SSMP) in accordance with 40 CFR §63.6(e)(3) and 40 CFR §63.1206(c)(2). [40 CFR §63.1206(c)(2)]
- ii. The Permittee shall keep the combustion zone sealed to prevent combustion system leaks. [40 CFR §63.1206(c)(5)]
- iii. The Permittee shall establish and maintain operator training and certification programs in accordance with 40 CFR §63.1206(c)(6). [40 CFR §63.1206(c)(6)]

Section III: Applicable Requirements and Compliance Demonstration

- iv. The Permittee shall prepare and at all times operate according to an Operation and Maintenance Plan (OMP) in accordance with 40 CFR §63.1206(c)(7). [40 CFR §63.1206(c)(7)]
- v. The Permittee shall install, calibrate, maintain and operate CEMS for CO and O₂ in accordance with 40 CFR §63.1209(a). [40 CFR §63.1209(a)]
- vi. The Permittee shall install, calibrate, maintain and operate other CMS (e.g., thermocouples, pressure transducers, flow meters) in accordance with 40 CFR §63.1209(b) to document compliance with the applicable operating parameter limits in Section III.A.1.a.iv of this Title V permit. [40 CFR §63.1209(b)]
- vii. The Permittee shall develop and implement a Feedstream Analysis Plan (FAP) in accordance with 40 CFR §63.1209(c)(2) to ensure that, prior to feeding the material, the Permittee obtains an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits in Section III.A.1.a.iv of this Title V permit. [40 CFR §63.1209(c)]
- viii. The Permittee shall comply with the performance evaluation requirements in 40 CFR §63.1209(d) which includes preparing a continuous monitoring system performance evaluation plan (CMS PEP) in accordance with 40 CFR §63.8(d)(2) and the Appendix to 40 CFR Part 63 Subpart EEE. [40 CFR §63.1209(d); 40 CFR §63.8(d)(2); Appendix to 40 CFR Part 63 Subpart EEE]
- ix. The Permittee shall comply with the provisions of 40 CFR §63.8 in regards to the conduct of monitoring. [40 CFR §63.1209(e)]
- x. The Permittee shall comply with the operation and maintenance requirements of CMS in 40 CFR §63.8(c) except as stated in 40 CFR §63.1209(f). [40 CFR §63.1209(f)]
- xi. The Permittee shall comply with the monitoring requirements in 40 CFR §§63.1209(j), (k), (l), (n), (o) and (p) for the monitoring parameters identified in Section III.A.1.a.iv of this Title V permit. [40 CFR §§63.1209(j), (k), (l), (n), (o), (p)]
- xii. The Permittee shall test the AWFCO system and associated alarms at least weekly to verify operability, unless the Permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. [40 CFR §63.1206(c)(3)(vii)]
- xiii. The Permittee shall conduct comprehensive performance tests, pursuant to 40 CFR §63.1207(b)(1), and confirmatory performance tests, pursuant to 40 CFR §63.1207(b)(2), on a frequency in accordance with 40 CFR §63.1207(d). Such testing shall be conducted in accordance with all applicable requirements of 40 CFR §63.1207. [40 CFR §63.1207]

c. Record Keeping Requirements

- i. If the Permittee elects to comply with all applicable requirements and standards promulgated under authority of the Clean Air Act, including Sections 112 and 129, in lieu of the requirements of 40 CFR Part 63 Subpart EEE when not burning hazardous waste, the Permittee must maintain documentation that they are in compliance with those requirements. [40 CFR §63.1206(b)(1)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

- ii. If the Permittee determines that a change, as defined in 40 CFR §63.1206(b)(5)(iii), will not adversely affect compliance with the emission standards or operating requirements, the Permittee must document the change in the operating record upon making such change. The Permittee must revise as necessary the performance test plan, Documentation of Compliance, Notification of Compliance, and startup, shutdown, and malfunction plan to reflect these changes. [40 CFR §63.1206(b)(5)(ii)]
- iii. The Permittee shall calculate the hazardous waste residence time and include the calculation in the performance test plan under 40 CFR §63.1207(f) and maintain documentation of the calculation. The Permittee must also provide the hazardous waste residence time in the Documentation of Compliance under 40 CFR §63.1211(c) and the Notification of Compliance under 40 CFR §§63.1207(j) and 63.1210(d). [40 CFR §63.1206(b)(11)]
- iv. The Permittee shall maintain a copy of the SSMP. [40 CFR §63.1206(c)(2)(iv)]
- v. The Permittee shall maintain copies of any documentation of investigation and evaluation of excessive exceedances during malfunctions as defined in 40 CFR §63.1206(c)(2)(v)(A)(3). [40 CFR §63.1206(c)(2)(v)(A)(3)(ii)]
- vi. The Permittee shall maintain copies of any documentation of investigation and corrective measures taken for any AWFCOs that result in an exceedance of an emission limit or operating parameter limit in Section III.A.1.a of this Title V permit. [40 CFR §63.1206(c)(3)(v)]
- vii. The Permittee shall maintain copies of any documentation of AWFCO operability test procedures and results. [40 CFR §63.1206(c)(3)(vii)]
- viii. The Permittee shall maintain a copy of the operator training and certification program. [40 CFR §63.1206(c)(6)(vii)]
- ix. The Permittee shall maintain a copy of the OMP. [40 CFR §63.1206(c)(7)(iv)]
- x. The Permittee shall maintain a copy of the FAP. [40 CFR §63.1209(c)(2)]
- xi. The Permittee shall maintain applicable records required by 40 CFR §§63.10(b) and (c). [40 CFR §§63.10(b) and (c)]
- xii. The Permittee shall maintain copies of any documentation of when the Permittee changes the mode of operation and begins complying with the operating limits for an alternative mode of operation as allowed by 40 CFR §63.1209(q)(1). [40 CFR §63.1209(q)]
- xiii. The Permittee shall maintain documentation of compliance as specified in 40 CFR §63.1211(c). [40 CFR §63.1211(c)(1)]

d. Reporting Requirements

- i. The Permittee shall submit the startup, shutdown, and malfunction plan to the Administrator for review and approval. [40 CFR §63.1206(c)(2)(ii)(B)]

Section III: Applicable Requirements and Compliance Demonstration

- ii. The Permittee shall, for each set of ten exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, submit to the Administrator a written report within five calendar days of the tenth exceedance documenting the exceedances and results of the investigation and corrective measures taken. On a case-by-case basis, the Administrator may require excessive exceedance reporting when fewer than ten exceedances occur during a 60-day block period. [40 CFR §63.1206(c)(3)(vi)]
- iii. The Permittee shall submit periodic startup shutdown and malfunction reports as specified in 40 CFR §63.10(d)(5)(i). The startup, shutdown and malfunction report shall be delivered or postmarked by the 30th day following each calendar half (January 30th and July 30th of each year). [40 CFR §63.10(d)(5)(i)]
- iv. The Permittee shall submit immediate startup, shutdown and malfunction reports as specified in 40 CFR §63.10(d)(5)(ii). The immediate report shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with §63.6(e)(1)(i). [40 CFR §63.10(d)(5)(ii)]
- v. The Permittee shall submit the excess emissions and CMS performance report and summary report as specified in 40 CFR §63.10(e)(3) semiannually by January 30th and July 30th each year. [40 CFR §63.10(e)(3)]

B. GROUPED EMISSIONS UNIT 1 (GEU-1): E Train & G Train

1. VOC - RCSA §22a-174-20(y): Manufacture of Polystyrene Resins

a. Limitation or Restriction

- i. VOC emissions shall not exceed 0.12 kg of VOC per 1,000 kg of product over any one hour period in total from the styrene condenser vent stream and the styrene recovery unit condenser vent stream. [RCSA §§22a-174-20(y)(2)(A) and (B)]
- ii. The Permittee shall achieve the emission limitation in Section III.B.1.a of this Title V permit by the use of a surface condenser or a system demonstrated to have a control efficiency equivalent to or greater than a surface condenser, and approved by the commissioner. [RCSA §§22a-174-20(y)(3)(A) and (B)]

b. Monitoring and Testing Requirements

- i. The Permittee shall, if requested by the commissioner, perform an emissions test in accordance with the methods RCSA §22a-174-20(y)(6) and which has been approved by the commissioner under the provision of RCSA §22a-174-5. [RCSA §22a-174-20(y)(4)]
- ii. The Permittee shall determine the production rate during emission testing from the current plant production records. If the plant production records show minor variation in the rate of polymer production, then an average or typical value may be used by the commissioner when approving the

Section III: Applicable Requirements and Compliance Demonstration

test method under RCSA §22a-174-5. [RCSA §22a-174-20(y)(5)]

- iii. The Permittee shall, if requested by the commissioner to perform an emissions test, determine the emission rate for total VOC measured as organic carbon per quantity of polystyrene using either of the methods described below:
[RCSA §§22a-174-20(y)(6)(A) and (B)]

$$(A) \quad M = \frac{(C)(Qsd)(0.50 \times 10^{-3})}{S}$$

Where:

M = Emission of volatile organic compound emissions per quantity of product produced (kg VOC/1000 kg product).

C = Total gaseous non-methane organic concentration of the effluent (ppm carbon equivalent) as measured by EPA Method 25 as found in 40 CFR Part 60 Appendix A.

Qsd = Dry volumetric stack gas flow rate corrected to standard conditions (dscm/hr).

S = Production rate during the emission test (kg/hr); or

$$(B) \quad M = \frac{(2.494 \times 10^{-3})(\sum_{i=1}^n C_i W_i)(Qs)}{S}$$

Where:

M = Emission of volatile organic compound emissions per quantity of product produced (kg VOC/1000 kg product).

C_i = Concentration of sample component i (ppm) as measured by EPA Method 18 as found in 40 CFR Part 60 Appendix A.

W_i = Molecular weight of sample component i (g VOC/gmole VOC).

Q_s = Volumetric stack gas flow rate corrected to standard conditions (scm/min).

S = Production rate during the emission test (kg/hr).

- iv. The Permittee shall monitor the operating parameters of the air pollution control equipment on the polystyrene production operation. The parameters monitored shall include, but not be limited to, the outlet temperature of the styrene condenser vent and the styrene recovery unit condenser vent or the outlet temperature of all condensers used to control these exhaust streams. The commissioner may allow periodic monitoring if continuous monitoring is technologically or economically infeasible. The commissioner may require additional monitoring as needed.
[RCSA §22a-174-20(y)(7)(A)]

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

The Permittee shall maintain monitoring records for a period of two years and shall make them available to Department personnel upon request. [RCSA §22a-174-20(y)(7)(B)]

d. Reporting Requirements

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

2. VOC – RCSA §22a-174-20(a): Storage of Volatile Organic Compounds and Restrictions for the Reid Vapor Pressure of Gasoline

a. Limitation or Restriction

The Permittee shall not place, store or hold in any stationary storage vessel of more than 250 gallon capacity any VOC with a vapor pressure of 0.75 pounds per square inch or greater under actual storage conditions unless such vessel is equipped with a permanent "submerged fill pipe" with a discharge point 18 inches or less from the bottom of the storage vessel or is a pressure tank as described in RCSA §22a-174-20(a)(2). [RCSA §22a-174-20(a)(5)]

b. Monitoring Requirements

The Permittee shall monitor the vapor pressure of each VOC loaded into any storage vessel of more than 250 gallons. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain a record of each storage vessel greater than 250 gallons, the name of the VOC currently contained in each storage vessel, the vapor pressure of each VOC, and the compliance method (submerged fill pipe or pressure tank). [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

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

3. VOC - RCSA §22a-174-20(x): Control of Volatile Organic Compound Leaks from Synthetic Organic Chemical & Polymer Manufacturing Equipment

a. Limitation or Restriction

The Permittee shall not cause, allow, or permit any evidence of leakage as determined through the use of test methods required in RCSA §22a-174-20(x)(8). [RCSA §22a-174-20(x)(3)]

b. Monitoring and Testing Requirements

i. The Permittee shall visually inspect every pump in light liquid service each week, except as provided in Section III.B.3.b.ix.(E) of this Title V permit. If indications of liquid leakage are found, the pump shall be repaired within 15 days after detection except as provided in Section III.B.3.b.x of this Title V permit. [RCSA §22a-174-20(x)(4)]

Section III: Applicable Requirements and Compliance Demonstration

- ii. The Permittee shall monitor each pump, valve, compressor, and safety/relief valve in gas/vapor service or in light liquid service for gaseous leaks at least once each quarter, except as provided in Section III.B.3.b.vii and Section III.B.3.b.ix of this Title V permit. For the required quarterly monitoring, the Permittee shall notify the Department's Air Compliance Unit of such monitoring at least ten days prior to the scheduled monitoring. If there is evidence of leakage, the Permittee shall repair the component within 15 days of detection, except as provided in Section III.B.3.b.x of this Title V permit. The monitoring procedure shall be in accordance with EPA Method 21.
[RCSA §22a-174-20(x)(5)(A)]
- iii. The Permittee shall monitor safety/relief valves after each over-pressure relief to ensure the valve has been properly resealed so that a concentration of volatile organic compounds is less than 1000 ppm. The monitoring procedure shall be in accordance with EPA Method 21.
[RCSA §22a-174-20(x)(5)(B)]
- iv. The Permittee shall install on each open-ended valve or line a cap, a blind flange, a plug, or a second closed valve which must remain attached to seal the open ended valve at all times except during operations requiring process fluid flow through the open line except in circumstances, as approved by the commissioner by permit or order, where this may cause a safety problem.
[RCSA §22a-174-20(x)(6)]
- v. The Permittee shall repair any fugitive emission source which appears to be leaking on the basis of sight, smell, or sound shall repair such leak within 15 days after detection except as provided in Section III.B.3.b.viii of this Title V permit. [RCSA §22a-174-20(x)(7)]
- vi. The Permittee shall either use: [RCSA §22a-174-20(x)(8)]
 - (A) a soap solution to detect gaseous VOCs leaks at all points of potential leakage where this test method is determined to be valid by the commissioner and where any bubble formation during a three minute observation period is deemed evidence of leakage; or
 - (B) a hydrocarbon detector test to detect gaseous VOCs and light liquid leaks where any measured concentration in excess of 10,000 ppm is deemed to be evidence of leakage.
- vii. The Permittee, if after four consecutive quarters of monitoring less than two percent of the valves in gas/vapor or light liquid service show evidence of leakage, may monitor the valves for gaseous leaks only once a year during the third or fourth quarter. If the number of valves showing evidence of leakage remains at two percent or less, then these valves need only be monitored once a year during the third or fourth quarter. However, if more than two percent of these valves show evidence of leakage, they shall be monitored every quarter until four consecutive quarters are monitored which have no more than two percent of these valves showing evidence of leakage.
[RCSA §22a-174-20(x)(9)]
- viii. The Permittee may make a request to the commissioner to delay a repair of a fugitive emission source until the next turnaround if the repair is infeasible for technical or safety reasons without a complete or partial shutdown of the process unit. [RCSA §22a-174-20(x)(10)]
- ix. Exemptions From Monitoring:
 - (A) When a fugitive emissions source is unsafe to monitor because of extreme temperatures, pressure, or because it is more than 12 feet above a permanent support surface, or other reasons, the Permittee may request a waiver from quarterly testing from the commissioner who may allow monitoring less frequently than each quarter provided the source is monitored once

Section III: Applicable Requirements and Compliance Demonstration

a year. [RCSA §22a-174-20(x)(13)(B)]

- (B) No monitoring shall be required under conditions where no leakage can occur such as fugitive emissions sources under vacuum. If such tests are run, leak free conditions will not be counted toward reductions in testing frequency. [RCSA §22a-174-20(x)(13)(C)]
 - (C) Safety relief valves that are isolated from the process by a frangible disc or rupture disc are exempted from the quarterly monitoring requirements provided they are monitored on an annual basis. [RCSA §22a-174-20(x)(13)(D)]
 - (D) Canned pumps which have demonstrated compliance with 40 CFR §60.482-2(e)(2) may be exempted from Section III.B.3.b.ii of this Title V permit provided they meet the requirements of 40 CFR §60.482-2(e)(3). [RCSA §22a-174-20(x)(13)(E)]
 - (E) Canned pumps which have demonstrated compliance with 40 CFR §60.482-2(e)(2) are exempted from Section III.B.3.b.i of this Title V permit provided they meet the requirements of 40 CFR §60.482-2(e)(3). [RCSA §22a-174-20(x)(13)(F)]
- x. Any evidence of leakage as described in Section III.B.3 of this Title V permit shall be treated as a malfunction of control equipment or methods as described in RCSA §22a-174-7. A retest in accordance with Section III.B.3.b.vi of this Title V permit shall be performed not more than two business days after all required repairs are complete. [RCSA §22a-174-20(x)(12)]

c. Record Keeping Requirements

- i. The Permittee shall maintain records that include: [RCSA §22a-174-20(x)(11)]
 - (A) identification of the source being inspected or monitored;
 - (B) dates of inspection or monitoring;
 - (C) results of inspection or monitoring;
 - (D) what action was taken if a leak was detected;
 - (E) type of repair made and date of repair;
 - (F) if the repair was delayed, an explanation as to why; and
 - (G) test method.
- ii. The Permittee is not required to maintain records of pump monitoring and inspection unless pumps are found to be leaking. [RCSA §22a-174-20(x)(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 specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

Section III: Applicable Requirements and Compliance Demonstration

4. Hazardous Air Pollutants (HAPs) – RCSA §22a-174-29 [STATE ONLY]

a. Limitation or Restriction

Concentrations of any HAP listed in Table 29-1 of RCSA §22a-174-29 shall not exceed the MASC at the source's discharge point(s). [RCSA §22a-174-29(b)(1)]

b. Monitoring and Testing Requirements

The Permittee shall calculate the MASC using the appropriate equations in RCSA §22a-174-29(c) and compare those to the ASC for each HAP emitted by this source. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records of the calculations required by Section III.B.4.b of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

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

5. 40 CFR Part 63 Subpart JJJ: National Emission Standards for Hazardous Air Pollutants for Group IV Polymers and Resins

a. Limitation or Restriction

i. Emission Standards – Group 2 Storage Vessels

The Permittee, for each Group 2 storage vessel, shall comply with the record keeping requirement in Section III.B.5.c.i of this Title V permit and is not required to comply with any other provisions of 40 CFR §§63.119 through 63.123 with the differences noted in 40 CFR §§63.1314(a)(1) through (17) for the purposes of 40 CFR Part 63 Subpart JJJ. [40 CFR §63.1314(a); 40 CFR §63.119(a)(3)]

ii. Equipment Leak Provisions

The Permittee shall follow all applicable requirements for pressure relief devices monitoring and test requirements in 40 CFR §63.1331(a)(9) except as specified in 40 CFR §63.1331(a)(9)(iv). [40 CFR §§63.1311(d)(7) and 63.1331(a)]

b. Monitoring and Testing Requirements

i. The Permittee shall follow all applicable leak inspection provisions of 40 CFR §63.148 with the differences noted in 40 CFR §§63.1314(a)(1) through (17) for the purposes of 40 CFR Part 63 Subpart JJJ. [40 CFR §63.1314(a)]

ii. The Permittee shall follow all applicable monitoring and test requirements in 40 CFR §63.180 with the differences noted in 40 CFR §§63.1331(a)(1) through (13) for the purposes of 40 CFR Part 63 Subpart JJJ. [40 CFR §63.1331(a)]

Section III: Applicable Requirements and Compliance Demonstration

- iii. The Permittee shall comply with the pressure relief device monitoring provisions of 40 CFR §63.1331(a)(9)(iii). [40 CFR §63.1311(d)(7)]

c. Record Keeping Requirements

- i. The Permittee shall maintain readily accessible records showing the dimensions of each Group 2 storage vessel and an analysis showing the capacity of each storage vessel. These records shall be kept as long as the storage vessels retain Group 2 status and are in operation. [40 CFR §63.123(a)]
- ii. The Permittee shall comply with the applicable recordkeeping requirements in 40 CFR Part 63 Subpart A as specified in Table 1 of 40 CFR Part 63 Subpart JJJ. [40 CFR §63.1335(b)]
- iii. The Permittee shall keep record of malfunctions in accordance with 40 CFR §§63.1335(b)(1)(i)(A) through (C). [40 CFR §63.1335(b)(1)]
- iv. The Permittee shall comply with all applicable record keeping requirements of 40 CFR §63.148 with the differences noted in 40 CFR §§63.1314(a)(1) through (17) for the purposes of 40 CFR Part 63 Subpart JJJ. [40 CFR §63.1314(a)]
- v. The Permittee shall comply with the applicable record keeping requirements of 40 CFR §63.181 with the differences noted in 40 CFR §§63.1331(a)(1) through (13) for the purposes of 40 CFR Part 63 Subpart JJJ. [40 CFR §63.1331(a)]
- vi. The Permittee shall comply with the applicable record keeping requirements for pressure relief devices in accordance with 40 CFR §63.1335(d)(10). [40 CFR §63.1335]

d. Reporting Requirements

- i. The Permittee shall comply with the applicable reporting requirements in 40 CFR Part 63 Subpart A as specified in Table 1 of 40 CFR Part 63 Subpart JJJ. [40 CFR §63.1335(b)]
- ii. The Permittee shall report malfunction in accordance with 40 CFR §63.1335(b)(ii). [40 CFR §63.1335(b)]
- iii. The Permittee shall submit periodic reports as specified in 40 CFR §§63.1335(e)(6)(i) through (xiii). In addition for equipment leaks subject to 40 CFR §63.1331, the Permittee shall submit the information specified in 40 CFR §63.182(d) under the conditions listed in 40 CFR §63.182(d). [40 CFR §63.1335(e)(6)]
- iv. The Permittee shall submit reports of changes to the primary product for a Thermoplastic Product Process Unit (TPPU) or process unit when the conditions of 40 CFR §§63.1310(f)(3)(iii), (f)(9), or (f)(10)(iii) are met as required by those sections. [40 CFR §63.1335(e)(7)(iii)]
- v. The Permittee shall submit a report as specified in 40 CFR §§63.1335(e)(7)(iv)(A) and (B) if they add a TPPU to a plant site in accordance with 40 CFR §63.1310(i)(1) or add emission points or make process changes to the existing source in accordance with 40 CFR §63.1310(i)(2). [40 CFR §63.1335(e)(7)(iv)]
- vi. The Permittee shall comply with all applicable reporting requirements of 40 CFR §63.182 with the difference noted in 40 CFR §§63.1331(a)(1) through (13) for the purposes of 40 CFR Part 63 Subpart JJJ. Such reports shall also include the information specified in 40 CFR §§63.148(j)(1) through (3), if applicable, with the differences noted in 40 CFR §§63.1314(a)(1) through (17) for the purposes of 40 CFR Part 63 Subpart JJJ. [40 CFR §§63.1314(a) and 63.1331(a)]

Section III: Applicable Requirements and Compliance Demonstration

C. GROUPED EMISSIONS UNIT 3 (GEU-3):

EU-3A: Detroit Diesel Emergency Engine (16.7 MMBtu/hr)

EU-3B: Clarke Emergency Engine Model JU6H (1.31 MMBtu/hr)

The emergency engines operate under:

- RCSA §22a-174-3b(e)

The emergency engines are subject to

- **EU-3A:** RCSA §22a-174-22f (16.7 MMBtu/hr)
40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine
- **EU-3B:** 40 CFR Part 60 Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

1. Operational Restrictions: Maximum Hours of Operation, Fuel Sulfur Content and Non-Emergency Operation

a. Limitation or Restriction

- i. The Permittee shall operate the engines as an emergency engine as defined in RCSA §22a-174-22e(a)(13). [RCSA §§22a-174-22f and 22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall not allow the emergency engines to operate except during periods of testing and scheduled maintenance or during an emergency and unless the following conditions are met: [RCSA §22a-174-3b(e)(2)]
 - (A) The Permittee shall operate each emergency engine for a maximum of 300 hours during any 12 month rolling aggregate. [RCSA §22a-174-3b(e)(2)(C)]
 - (B) Any non-gaseous fuel consumed by the emergency engine shall not exceed the sulfur content of motor vehicle diesel fuel where “motor vehicle diesel fuel” is defined in RCSA §22a-174-42. [RCSA §22a-174-3b(e)(2)(D)]
 - (C) The owner or operator of an emergency engine shall not operate the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to unhealthy for sensitive groups” or greater. If, subsequent to the initial forecast of “moderate to unhealthy for sensitive groups” or greater, the forecast is revised to “moderate” or lower, the owner or operator is no longer prohibited from operating the engine for routine, scheduled testing or maintenance for the remainder of that day. An owner or operator of an emergency engine may rely on an ozone forecast of “moderate” or lower obtained after 3 p.m. on the preceding day. Subsequent changes to the ozone forecast after 3 p.m. that forecast ozone levels of “moderate to unhealthy for sensitive groups” or greater shall not obligate the owner or operator to refrain from operation of the emergency engine at the facility on the following day. The commissioner may exempt, by permit or order, the owner or operator of an emergency engine from this subdivision if such emergency engine is unattended and the testing is automated and cannot be modified from a remote location. [RCSA §22a-174-22f(d)(2)]

b. Monitoring and Testing Requirements

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

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

The Permittee shall make and keep the following records:

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

d. Reporting Requirements

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

2. NO_x – EU-3A ONLY (rated capacity greater than 2 MMBtu/hr)

a. Limitation or Restriction

Emergency engines do not have emission limits for NO_x. However there are record keeping and reporting requirements. [RCSA §22a-174-22f(g)]

b. Monitoring and Testing Requirements

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

c. Record Keeping Requirements

The Permittee shall make and keep the following records for a minimum of five years; commencing on the date such records were created:

- i. Records shall be those required by 40 CFR §63.6655 as stated in Section III.C.3.c of this Title V permit. [RCSA §22a-174-22f(g)(3)(A)]
- ii. The date and work performed for repairs, replacement of parts and other maintenance; and [RCSA §22a-174-22f(g)(3)(B)]
- iii. Copies of all documents submitted to the commissioner pursuant to RCSA §§22a-174-22f. [RCSA § 22a-174-22f(g)(3)(C)]
- iv. For each tune-up, for each emission unit, conducted pursuant to RCSA §22a-174-22f(g)(2)(E):

Section III: Applicable Requirements and Compliance Demonstration

- (A) The date on which the emission unit is tuned-up;
- (B) The name, title and affiliation of the person performing the tune-up;
- (C) A description of the work performed; and
- (D) The procedures used to inspect and perform adjustments.

d. Reporting Requirements

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

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

Notes:

- The emergency engine is not subject to the numerical emission limitations in 40 CFR Part 63 Subpart ZZZZ. [40 CFR §63.6602, Table 2c (1)]
- Since the emergency engine is not subject to the numerical emission limitations in 40 CFR Part 63 Subpart ZZZZ, it is not subject to the notifications specified in 40 CFR §63.6645(a).

a. Limitation or Restriction

The Permittee must operate the emergency stationary RICE according to the requirements of 40 CFR §63.6640(f). The Permittee may operate the emergency stationary RICE for any combination of the following purposes for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR §63.6640(f)(2)(i)]

b. Monitoring Requirements

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

c. Record Keeping Requirements

The Permittee must keep records of the hours of operation of the emergency engines that are recorded through the non-resettable hour meters. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR §§63.6640(f)(2)(ii) or (f)(2)(iii) or (f)(4)(ii), the Permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of the engine operation for these purposes. [40 CFR §63.6655(f)]

Section III: Applicable Requirements and Compliance Demonstration

d. Reporting Requirements

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

4. 40 CFR Part 63 Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – EU-3B ONLY

- EU-3B is a Certified fire pump engine (149 BHP/111.1 kW) with a displacement of less than 30 liters/cyl; manufactured prior to the model years in Table 3 of 40 CFR Part 60 Subpart III; constructed after July 11, 2005 and manufactured after July 1, 2006.

Notes:

- Pursuant to 40 CFR §63.6590(c)(3), EU-3B meets the requirements of 40 CFR Part 63 Subpart ZZZZ by complying with 40 CFR Part 60 Subpart III.
- Pursuant to 40 CFR §60.4214(b), the Permittee is not required to submit an Initial Notification.

a. Limitation or Restriction

- i. The Permittee must comply with the emissions standards in Table 4 of Subpart III for greater than 750 HP model year engines 2007 and earlier over the entire life of the engine. [40 CFR §§60.4205(c) and 60.4206]
- ii. The Permittee must do all the following, except as permitted under paragraph (g) of 40 CFR §60.4211(g): [40 CFR §60.4211(a)]
 - (A) Operate and maintain the fire pump engine 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, 94 and/or 1068 as they apply.
- iii. The Permittee shall operate the fire pump engine for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the fire pump engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the fire pump engine beyond the 100 hours per calendar year. [40 CFR §60.4211(f)(2)(i)]
- iv. Beginning October 1, 2010; the Permittee of stationary CI ICE subject to 40 CFR Part 60 Subpart III with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR §80.510(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR §60.4207(b)]
- iv. If the Permittee does not install, configure, operate, and maintain the fire pump engine according to the manufacturer's emission related written instructions, or if the Permittee changes emission-related settings in a way that is not permitted by the manufacturer, compliance must be demonstrated as

Section III: Applicable Requirements and Compliance Demonstration

specified in 40 CFR §§60.4211(g)(1) through (3). [40 CFR §60.4211]

b. Monitoring and Testing Requirements

The Permittee shall monitor the hours of operation of the fire pump engine using a non-resettable hour meter. [40 CFR §60.4209(a)]

c. Record Keeping Requirements

The Permittee shall keep records of the operation of the fire pump engine in emergency and non-emergency service that are recorded through an hour meter. The Permittee must record the time of operation of the fire pump engine and the reason the fire pump engine was in operation during that time. [40 CFR §60.4214(b)]

d. Reporting Requirements

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

D. GROUPED EMISSIONS UNIT 4 (GEU-4): Silos

1. Total Suspended Particles (TSP)

a. Limitation or Restriction

The Permittee shall not exceed the particulate emissions limits calculated pursuant to RCSA §22a-174-18(f). [RCSA §22a-174-18(f)]

b. Monitoring and Testing Requirements

- i. The Permittee shall check for visible dust emissions from the particulate air filter systems on a daily basis when silo systems are running. When visible emissions are detected, the Permittee shall take immediate corrective action. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall verify the fabric filters are operating in a manner consistent with the manufacturer's specified outlet grain loading by monitoring pressure differential. Proper operation of the fabric filters will be verified by confirming that the pressure differential is within normal operating range. The Permittee shall replace filters as needed based on the conditions found during annual preventative maintenance inspections. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. If required by the commissioner, the Permittee shall conduct stack test using EPA Method 5 of 40 CFR Part 60 Appendix A. Such stack tests shall be conducted at such intervals as the commissioner may specify and in such a manner satisfactory to the commissioner. [RCSA §22a-174-5(e)(2)]

c. Record Keeping Requirements

- i. The Permittee shall maintain records of the daily checks required by Section III.D.1.b of this Title V permit and any corresponding corrective actions taken. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall maintain records of pressure differential and filter maintenance, installation, replacement, and removal dates, whenever such action is taken. [RCSA §22a-174-33(j)(1)(K)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

- iii. If stack testing is required by the commissioner, the Permittee shall keep records of test results. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

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

E. EMISSIONS UNIT 5 (EU-5) – Parts Washer

1. VOC: RCSA §22a-174-20(l) – Metal Cleaning

a. Limitation or Restriction

Except as provided in RCSA §§22a-174-20(l)(6), (l)(7) or (l)(8), the Permittee shall operate any cold cleaning unit with an internal volume greater than one liter and using solvents containing greater than 5% VOCs by weight in compliance with the requirements of RCSA §22a-174-20(l)(3). [RCSA §22a-174-20(l)(3)]

- i. The Permittee shall equip EU-5 with a cover that is easily operated with one hand. [RCSA §22a-174-20(l)(3)(A)]
- ii. The Permittee shall equip EU-5 with an internal rack or equipment for draining cleaned parts so that parts are enclosed under the cover while draining. Such drainage rack or equipment may be external for applications where an internal type cannot fit into the cleaning system. [RCSA §22a-174-20(l)(3)(B)]
- iii. The Permittee shall collect and store waste solvent in closed containers. Closed containers used for storing waste solvent may contain a device that allows pressure relief but does not allow liquid solvent to drain from the container. [RCSA §22a-174-20(l)(3)(C)]
- iv. The Permittee shall close the cover of EU-5 if parts are not being handled in the cleaner for two minutes or more, or if the device is not in use. [RCSA §22a-174-20(l)(3)(D)]
- v. The Permittee shall drain the cleaned parts for at least 15 seconds or until dripping ceases, whichever is longer. [RCSA §22a-174-20(l)(3)(E)]
- vi. The Permittee shall minimize the drafts across the top of EU-5 such that whenever the cover is open the unit is not exposed to drafts greater than 40 meters per minute, as measured between one and two meters upwind, and at the same elevation as the tank lid. [RCSA §22a-174-20(l)(3)(G)]
- vii. The Permittee shall not operate EU-5 upon the occurrence of any visible solvent leak until such leak is repaired. Any leaked solvent or solvent spilled during transfer shall be cleaned immediately, and the wipe rags or other sorbent material used to clean the spilled or leaked solvent shall be immediately stored in covered containers for disposal or recycling. [RCSA §22a-174-20(l)(3)(H)]
- viii. The Permittee shall provide a permanent, conspicuous label on or posted near EU-5 summarizing the applicable operating requirements. [RCSA §22a-174-20(l)(3)(I)]
- ix. The Permittee shall only use solvent that has a vapor pressure less than or equal to 1.0 mmHg at 20 degrees Celsius. [RCSA §22a-174-20(l)(3)(K)]

Section III: Applicable Requirements and Compliance Demonstration

- x. The Permittee shall not clean sponges, fabric, wood, leather, paper and other absorbent material in EU-5. [RCSA §22a-174-20(1)(3)(L)]

b. Monitoring and Testing Requirements

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

c. Record Keeping Requirements

- i. The Permittee shall maintain the following records: [RCSA §22a-174-20(1)(3)(J)]

- (A) the type of solvent used, including a description of the solvent and the solvent name;
- (B) the vapor pressure of the solvent in mmHg measured at 20 degrees Celsius (68 degrees Fahrenheit);
- (C) the percent VOC content by weight; and
- (D) the amount of solvent added to each unit on a monthly 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 specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

F. EMISSIONS UNIT 2 (EU-2): Dowtherm Heater B

1. 40 CFR Part 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heater

- The heater has a Maximum Rated Capacity of 9 MMBtu/hr.
- It only burns natural gas (Gas 1) as fuel to operate as a process heater.

Note: Dowtherm Heater B burns natural gas and vapors from the facility's process tanks due to working and breathing losses from the tanks and venting of the cargo trucks during loading of Styrene. The vapors burned in Dowtherm Heater B enter with the combustion air blower. The primary purpose of the combustion air blower is providing oxygen necessary for combustion of the natural gas. Vapors are routed to Dowtherm Heater B to minimize emissions to the atmosphere.

a. Limitation or Restriction

- i. The Permittee shall operate the heater as a Gas 1 Unit. The heater will not be subject to emission limits in Tables 1, 2 or 11 through 13 or the operating limits in Table 4 in 40 CFR §63.7500(e). [40 CFR §63.7500(e)]
- ii. The Permittee shall conduct tune-ups biennially as specified in 40 CFR §63.7540. [40 CFR §63.7540 and Table 3 to Subpart DDDDD]

b. Monitoring and Testing Requirements

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

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

- i. The Permittee shall keep a copy of each notification and report submitted to comply with 40 CFR Part 63 Subpart DDDDD, including all documentation supporting any notification of compliance status or semiannual reports submitted. [40 CFR §63.7555(a)(1)]
- ii. The Permittee shall keep records for a period of five years from the date that each record was created and must make them available upon request. [40 CFR §§63.7560(c)]

d. Reporting Requirements

The Permittee must submit all compliance reports electronically to the Environmental Protection Agency in accordance with 40 CFR §63.7550. [40 CFR §63.7550]

G. GROUPED EMISSIONS UNIT 6 (GEU-6): Styrene Loading Terminal

1. 40 CFR Part 63 Subpart EEEE: National Emission Standards for Hazardous Air Pollutants for Major Sources: Organic Liquids Distribution (Non-Gasoline)

- The loading rack has a Maximum Rated Capacity of 281 gpm of styrene.

a. Limitation or Restriction

i. Emission Standards – Loading Rack

The Permittee, for each styrene loading rack, shall route emissions to the vent recovery system for Heater A (EU-1) and/or Heater B (EU-2). [40 CFR §63.2346(b)(2)]

ii. Emission Standards – Transport Vehicles

The Permittee shall ensure that organic liquids are loaded only into transport vehicles that have a current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR §173.31 for tank cars. [40 CFR §63.2346(d)(2)]

iii. Equipment Leak Provisions

The Permittee, for each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year, must comply with the applicable requirements under 40 CFR Part 63 Subpart H. [40 CFR §63.2346(c)]

b. Monitoring and Testing Requirements

- i. The Permittee shall ensure that except during periods of startup, shutdown and malfunction, Heater A and or Heater B shall be operating at all times when emissions from the styrene loading rack are routed to it. [40 CFR §§63.2346(e), 63.984(a)(1)]
- ii. The Permittee shall ensure that no pressure relief device in the transfer rack's system returning vapors to Heater A and/or Heater B shall open to the atmosphere during loading. Pressure relief devices needed for safety purposes are not subject to this paragraph. [40 CFR §63.984(a)(2)]
- iii. If emissions from the styrene loading rack are routed to Heater A and/or Heater B, there is no requirement to conduct a performance test or design evaluation. [40 CFR §63.984(b)]

Section III: Applicable Requirements and Compliance Demonstration

- iv. The Permittee shall confirm each transport vehicle into which styrene is loaded has a current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR Part 180 or 49 CFR §173.31 for tank cars.[40 CFR §63.2346(d)(2)]
- v. The Permittee shall follow all applicable leak detection monitoring and test requirements in 40 CFR §63.180. [40 CFR §63.2346(c)]

c. Record Keeping Requirements

- i. The Permittee shall maintain records of the annual volume of styrene loaded through the styrene terminal for the purpose to determining if the transfer rack status is high-throughput (11.8 million liters per year or greater) or low-throughput (less than 11.8 million liters per year). [40 CFR §63.2390(d)]
- ii. The Permittee shall maintain records of Heater A and/or Heater B operating state for all periods during which the styrene loading rack is used. [40 CFR §63.2346(e)]
- iii. The Permittee shall maintain records of pressure relief vent status for all periods during which the styrene loading rack is used. [40 CFR §63.984(b)]
- iv. The Permittee shall keep records of malfunctions in accordance with 40 CFR §63.998(d)(3). [40 CFR §63.998(d)(3)]
- v. The Permittee shall comply with the applicable leak detection and repair record keeping requirements of 40 CFR §63.181. [40 CFR §63.2346(c)]
- vi. The Permittee shall record that the verification of U.S. DOT tank certification has been performed for each transport vehicle loaded at the styrene terminal. Various methods for the record of verification can be used, such as: a check-off on a log sheet, a list of U.S. DOT serial numbers, or a position description for gate security showing that the security guard will not allow any trucks on site that do not have the appropriate documentation. [40 CFR §63.2390(c)(3)]

d. Reporting Requirements

- i. The Permittee shall comply with the applicable reporting requirements in 40 CFR Part 63 Subpart A as specified in Table 12 of 40 CFR Part 63 Subpart EEEE. [40 CFR §63.2382(a)]
- ii. The Permittee shall submit an Initial Notification to the Administrator and the commissioner no later than 120 days after initial startup. [40 CFR §63.2382(b)(2)]
- iii. The Permittee shall submit a Notification of Compliance Status report, as specified in 40 CFR §63.999(b)(1) and 40 CFR §63.2382(d)(1), to the Administrator and the commissioner no later than 240 days after initial startup. [40 CFR §63.2382(d)]
- iv. The Permittee shall submit periodic reports as specified in 40 CFR §63.2386 per the schedule defined in 40 CFR §63.2386(b). [40 CFR §63.2386]
- v. The Permittee shall comply with all applicable leak detection and repair reporting requirements of 40 CFR §63.182. [40 CFR §63.2346(c)]

Section III: Applicable Requirements and Compliance Demonstration

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

Section III: Applicable Requirements and Compliance Demonstration

- 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. Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
- 19. Hazardous Air Pollutants:** The Permittee shall comply with the requirements for Hazardous Air Pollutant emissions as set forth in RCSA §22a-174-29.
- 20. Protection of Stratospheric Ozone:** The Permittee shall comply with all applicable requirements of 40 CFR Part 82 Subpart F.
- 21. Asbestos:** Should the premises, as defined in 40 CFR §61.145, become subject to the national emission standard for asbestos regulation in 40 CFR Part 61 Subpart M when conducting any renovation or demolition at the premises, then the Permittee shall submit proper notification as described in 40 CFR §61.145(b) and shall comply with all other applicable requirements of 40 CFR Part 61 Subpart M.

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.** Open Burning: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
- H.** Fuel Sulfur Content
 - 1. For the period beginning July 1, 2014 and ending June 30, 2018, the Permittee shall not use No. 2 heating oil that exceeds five hundred parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(A); and
 - 2. On or after July 1, 2018, the Permittee shall not use No. 2 heating oil that exceeds fifteen parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(B) .
- I.** The Permittee shall comply with the requirements for Architectural and Industrial Maintenance Coatings as set forth in RCSA §22a-174-41.
- J.** 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 submitted per the procedure required by the applicable requirement or otherwise 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.D of this Title V permit, the Permittee shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

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

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

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

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

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

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

This Title V permit shall not be deemed to:

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

Section VI: Title V Requirements

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

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

N. PERMIT AVAILABILITY

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

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

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

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

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

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

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

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

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

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

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

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-6m.

W. REVOCATION [RCSA §22a-174-2a(h)]

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

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

Section VI: Title V Requirements

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

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

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

Y. CREDIBLE EVIDENCE

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