

Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

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

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

<b>Title V Permit Number</b>	092-0028-TV
<b>Client/Sequence/Town/Premises Numbers</b>	8661/1/92/2
<b>Date Issued</b>	January 19, 2012
<b>Expiration Date</b>	January 19, 2017

<b>NAME CHANGED TO:</b>	
<b>Corporation:</b>	<u>TRINSEO, LLC</u>
<i>Styron LLC</i>	
<b>Premises Location:</b>	<b>Engineer:</b> <u>BEA MILNE</u> <b>Date:</b> <u>7/22/15</u>
<i>1761 Route 12, Gales Ferry, CT 06335</i>	
<b>Name of Responsible Official and Title:</b>	
<i>Ted Kietzman, Site Leader</i>	

All the following attached pages, 2 through 40, are hereby incorporated by reference into this Title V permit.

/s/ Macky McCleary  
Macky McCleary  
Deputy Commissioner

1/19/12  
Date

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## LIST OF ABBREVIATIONS/ACRONYMS

<i>Abbreviation/Acronym</i>	<i>Description</i>
°C	Degree Celsius
°F	Degree Fahrenheit
acfm	Actual cubic feet per minute
AP-42	Compilation of Air Pollutant Emission Factors
ASC	Actual Stack Concentration
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
EU	Emissions Unit
EPA	Environmental Protection Agency
EPPU	Elastomer Product Process Unit
ft <sup>3</sup>	Cubic Feet
GEU	Grouped Emissions Units
HAP	Hazardous Air Pollutant
HLV	Hazard Limiting Value
hr	Hour
lb	Pound
m <sup>3</sup>	Cubic Meters
MASC	Maximum Allowable Stack Concentration
MMBtu	Million British Thermal Units
mmHg	Millimeters of Mercury
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSR	New Source Review
Pb	Lead
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter less than 10 microns
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns
ppmv	Parts per million, volumetric basis
RACT	Reasonably Available Control Technology
RCSA	Regulations of Connecticut State Agencies
SIC	Standard Industrial Classification Code
SO <sub>x</sub>	Sulfur Oxides
TOC	Total Organic Carbon
tpy	Tons per year
µg	Micrograms
VOC	Volatile Organic Compound
yr	Year

## **Title V Permit**

**All conditions in Sections III, IV, VI and VII 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, VI and VII of this Title V permit in accordance with the Clean Air Act, as amended.**

## Section I: Premises Information/Description

### A. PREMISES INFORMATION

Nature of Business: Polymer Production  
Primary SIC: 2821 (Latex)

Facility Mailing Address: Styron LLC, 1761 Route 12, Gales Ferry, CT 06335  
Telephone Number: (860) 447-7369

### B. PREMISES DESCRIPTION

Styron LLC (Styron) owns the premises at 1761 Route 12, Gales Ferry, CT. A portion of the premises is leased to The Dow Chemical Company and Americas Styrenics, LLC (AmSty).

Styron and AmSty constitute a single stationary source under common control pursuant to the Clean Air Act because Styron holds a 50% joint venture interest in AmSty, they share the same SIC code and are located on the same contiguous premises. The companies had the option of obtaining one Title V permit for the entire premises or individual Title V permits for each company. Styron and AmSty have chosen to obtain separate Title V permits.

Styron's Latex Plant (Permit No. 092-0016) produces different emulsion polymers using styrene, acrylonitrile and 1,3-butadiene as the primary monomers. Other monomers are used to vary the characteristics of the polymer. The manufacturing process consists of the monomer and aqueous feeds to the reactor. Unreacted raw materials and diluents are then removed from the products via stripping. The vapors emitted from the reactor and the stripper are hard piped to the styrene scrubber, which captures the volatile organic compounds (VOC) and are then sent back to the process for reuse. VOC emissions that are not recovered by the scrubber are then routed to a thermal oxidizer for treatment. The thermal oxidizer was installed in 1991 and has a control efficiency of at least 99.9%. After stripping, the Latex product is cooled, filtered, blended and adjusted prior to being transferred to the finished product storage facilities. Various additives are added to the products to vary their properties. The product is used within the paper industry to coat paper and within the flooring industry on the backing of vinyl flooring.

Styron also operates two permitted steam boilers in support of the Latex manufacturing process: Wickes Boiler E7C4 and Wickes Boiler E7D3 (Permit Nos. 092-0015 and 092-0020). Two emergency engines are operated by Styron under RCOSA §22a-174-3b(e). A significant number of emissions units are exempt from the permitting requirements due to the regulations in effect at the time of installation, these include tanks, solvent cleaning operations, and other equipment used to support the Latex manufacturing process. These units, if not subject to specific applicable requirements, are subject to any applicable premises-wide general requirements in Section III.H of this Title V permit.

Styron is subject to 40 CFR Part 63 Subpart U "*National Emission Standards for Hazardous Air Pollutants (NESHAP) for Group I Polymer and Resins.*" Certain applicable provisions from 40 CFR Part 63 Subpart H "*NESHAP for Equipment Leaks,*" and Subpart G "*NESHAP for Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*" apply via Subpart U.

Styron operates two emergency generators that are affected sources under 40 CFR Part 63 Subpart ZZZZ "*NESHAP for Stationary Reciprocating Internal Combustion Engines.*" The compliance date for these engines is May 3, 2013.

The Styron and AmSty single stationary source is currently a major stationary source for Nitrogen Oxides (NO<sub>x</sub>). Styron also operates units that are subject to the above mentioned NESHAPs which requires the source to obtain a Title V permit.

## Section II: Emissions Units Information

### A. EMISSIONS UNITS DESCRIPTION

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

TABLE II.A: EMISSIONS UNITS DESCRIPTION			
Emissions Unit	Emissions Unit Description	Control Unit Description	Permit (P) or Regulation Number
GEU-001  Latex Production	EU-001A	Latex Reactors (R3300, R400A)	Thermal Oxidizer  P 092-0016  40 CFR Part 63 Subpart U
	EU-001B	Latex Stripper (T-3410)	
	EU-001C	Latex Styrene Scrubber (T3510)	
	EU-001D	Latex Degasser (D3400)	
	EU-001E	Latex Step Tank (V3405)	
	EU-001F	Latex Recycle Storage Tanks (V3500A, V3500B)	
	EU-001G	Latex Decanter Storage (V3575)	
	EU-001H	Latex Vacuum Cooler (V3420)	
	EU-001I	Latex Reflux Condenser (E3300)	
	EU-001J	Latex Column Condenser (E3410)	
	EU-001K	Latex Vacuum Condenser (E3420)	
	EU-001L	Latex Knock Out Pot (V3411)	
	EU-001M	Latex Stripper "A" (D500A)	
	EU-001N	Latex Stripper Condenser (E510A)	
	EU-001O	Latex Reactor "A" Reflux Condenser (E430A)	
	EU-001P	Latex Knockout Tank (D510A)	
	EU-001Q	Latex Separator Pot (D575A)	
	EU-001R	Latex Inhibitor Tank (ME512A)	
	EU-001S	Latex Thermal Oxidizer Knock Out Pot (V3513)	
	EU-001T	Latex Partial Condenser (T515A)	

## Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION				
Emissions Unit		Emissions Unit Description	Control Unit Description	Permit (P) or Regulation Number
GEU-001  Latex Production	EU-001U	Latex Hot Water Tank (D520A)	Thermal Oxidizer	P 092-0016  40 CFR Part 63 Subpart U
	EU-001V	Latex Styrene Scrubber Storage (V3510)		
	EU-002	Latex Butadiene Storage Sphere (V3200)	Pressurized Tank	
	EU-003	Latex Acrylic Acid Tank (V46)	Conservation Vents	
	EU-004	Latex Tertiary-Dodecyl-Mercaptan Tank (V3250)	Nitrogen Blanket & Rupture Disk	
	EU-005	Latex Ammonium Hydroxide Storage Tank (V39) (29% ammonia)	Conservation Vents	
	EU-006	Latex Hydroxyl-Ethyl-Acrylate Tank (V140A)	Conservation Vents	
	EU-007	Acrylonitrile Storage Tank (D38)	Pressurized Tank	
	EU-014	Styrene Unload Rack and Storage Tanks - D1, D2, and D3	Vapor Recovery Vent & Nitrogen Blanket	
EU-008	Wickes E7C #4 Boiler	Low NO <sub>x</sub> Burner	P 092-0015	
EU-009	Wickes E7D #3 Boiler	Low NO <sub>x</sub> Burner	P 092-0020	
EU-010	Fuel Storage – Gasoline Tank and Dispensing Station (D38)	Submerged Fill Pipe	RCSA §22a-174-20	
GEU-011  Parts Cleaning Operations	EU-011A	Parts Cleaning Operations use of Petroleum Distillate (Safety Kleen)	None	RCSA §22a-174-20(l)
	EU-011B	Parts Cleaning Operations use of Aqueous Based Cleanser		
GEU-012	EU-012A	Emergency Engine Model V6-125, 149BHP (Bldg. 41)	None	RCSA §22a-174-3b(e)
Emergency Engines	EU-012B	Emergency Engine Model NHS-6-IF, Cummins, 250 BHP (Bldg. 47)		40 CFR Part 63 Subpart ZZZZ

**Section II: Emissions Units Information**

<b>TABLE IIA: EMISSIONS UNITS DESCRIPTION</b>				
<b>Emissions Unit</b>	<b>Emissions Unit Description</b>		<b>Control Unit Description</b>	<b>Permit (P) or Regulation Number</b>
<i>All applicable requirements for the following units are listed in the premises-wide general requirements portion of this Title V permit:</i>				
GEU-013  Fuel Storage Tanks	EU-013A	No. 2 Fuel Oil Storage Tank (D9A)	None	None
	EU-013B	No. 2 Fuel Oil Storage Tank (D9B)		
	EU-013C	No. 2 Fuel Oil Storage Tank (D9C)		
	EU-013D	No. 2 Fuel Oil Storage Tank (D9D)		
	EU-013E	No. 2 Fuel Oil Storage Tank (D39)		
	EU-013F	No. 2 Fuel Oil Storage Tank (Bldg. 41)		
	EU-013G	No. 2 Fuel Oil Storage Tank (Bldg. 47)		
	EU-013H	No. 2 Fuel Oil Storage Tank (Bldg. 44)		
EU-015	Latex Cooling Tower	Drift Eliminator	None	
EU-016	Latex Waste Water Treatment Plant	None	None	
EU-017	Ethylene Glycol Supply Line and Refrigeration Units	None	None	
EU-018	Various Latex Process Filters	None	None	

**Section II: Emissions Units Information**

**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.

<b>TABLE II.B: OPERATING SCENARIO IDENTIFICATION</b>	
<b>Emissions Units Associated with the Scenario</b>	<b>Description of Scenario</b>
All units are included in the standard operating scenario.	Latex Production (includes EU-001A through EU-0018)

### Section III: Applicable Requirements and Compliance Demonstration

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

#### A. GEU-001– Latex Production

##### 1. Maximum Annual Latex Production

###### a. Limitations or Restrictions

The maximum annual latex production shall not exceed 186,000 tpy (wet). [P 092-0016]

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

The Permittee shall monitor the latex production from GEU-001 using a mass balance and good engineering practices. [RCSA §22a-174-33(j)(1)(K)(ii)]

###### c. Record Keeping Requirements

The Permittee shall record the monthly and consecutive 12 month latex production. Annual latex production shall be based on any consecutive 12 month time period and shall be determined by adding the current month's production to that of the previous 11 months. These calculations shall be made on a monthly basis. [P 092-0016]

##### 2. Maximum Annual Fuel Usage

###### a. Limitations or Restrictions

The maximum annual fuel usage for the thermal oxidizer shall not exceed 22,800,000 ft<sup>3</sup>/yr of natural gas. [P 092-0016]

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

The Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor fuel feed to the thermal oxidizer when more than one fuel supply is to service the thermal oxidizer or when multiple sources are supplied by one fuel supply. [RCSA §22a-174-33(j)(1)(K)(ii)]

###### c. Record Keeping Requirements

The Permittee shall record the monthly and consecutive 12 month natural gas usage. Annual natural gas usage shall be based on any consecutive 12 month time period and shall be determined by adding the current month's usage to that of the previous 11 months. These calculations shall be made on a monthly basis. [P 092-0016]

### Section III: Applicable Requirements and Compliance Demonstration

#### 3. Thermal Oxidizer Operating Limitations

##### a. Limitations or Restrictions

- i. The minimum operating temperature of the thermal oxidizer shall be at least 1600 °F. [P 092-0016]
- ii. The minimum residence time of the thermal oxidizer shall be at least 1.00 seconds. [P 092-0016]
- iii. The minimum destruction efficiency of the thermal oxidizer shall be at least 99.9%. [P 092-0016]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall operate and maintain the latex plant and thermal oxidizer equipment in accordance with the manufacturer's instructions or the Permittee's operational procedures based on good engineering judgment. [P 092-0016, RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. If required by the commissioner, the Permittee shall conduct emissions testing to verify the equipment is in compliance with Sections III.A.3.a.i through iii of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

##### c. Record Keeping Requirements

The Permittee shall maintain operating records, including any past and present emissions test results, which demonstrate compliance with the limitations of Section III.A.3.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### 4. Criteria Air Pollutants

##### a. Limitations or Restrictions

The Permittee shall not cause or allow GEU-001 to exceed the following emissions limits at any time [P 092-0016]:

Pollutant	Latex Plant		Thermal Oxidizer		Combined
	lb/hr	tpy	lb/hr	tpy	tpy
PM	--	--	0.050	0.087	0.087
SO <sub>x</sub>	--	--	0.004	0.007	0.007
NO <sub>x</sub>	--	--	0.664	1.140	1.140
VOC	1.00	1.22	0.037	0.063	1.283
CO	--	--	0.558	0.958	0.958

### Section III: Applicable Requirements and Compliance Demonstration

#### b. Monitoring and Testing Requirements

- i. The Permittee shall demonstrate compliance with the emissions limits in Section III.A.4.a.i of this Title V permit by calculating the emission rates using emission factors from the following sources:
  - (A) Mass balance using good engineering practices and emissions factors from AP-42, 5<sup>th</sup> Edition, "Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Area Sources", September 1998, Table 6.10-1 *Emulsion Styrene-Butadiene Copolymer Production*.
  - (B) AP-42, 5<sup>th</sup> Edition, "Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Area Sources", September 1998, Tables 1.4-1, 1.4-2, and 1.4-3 *External Combustion Sources, Natural Gas Combustion*. [P 092-0016]
- ii. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the emission limits in Section III.A.4.a.i of this Title V permit as allowed by state or federal statute, law or regulation. [P 092-0016]

#### c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM, SO<sub>x</sub>, NO<sub>x</sub>, CO, and VOC emissions in units of tons to demonstrate compliance with Section III.A.4.a.i of this Title V permit. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall calculate and record the monthly and consecutive 12 month VOC process and fugitive emissions in units of tons to demonstrate compliance with Section III.A.4.a.ii of this Title V permit. The consecutive 12 month emissions shall be determined by adding the current month's VOC process and fugitive emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iii. The Permittee shall maintain operating records, including any past and present emissions test results, which demonstrate compliance with the limitation of Section III.A.4.a.iii of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

### Section III: Applicable Requirements and Compliance Demonstration

#### 5. VOC – Storage Vessels

##### a. Limitations or Restrictions

- i. 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 1.5 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). This requirement shall not apply to the loading of VOC into any storage vessel having a capacity of less than 1,000 gallons which was installed prior to June 1, 1972, nor to any underground storage vessel installed prior to June 1, 1972, where the fill pipe between the fill connection and the storage vessel is an offset fill pipe. [RCSA §22a-174-20(a)(3), RCSA §22a-174-20(a)(4)]
- ii. The Permittee shall not place, store or hold in any stationary tank, reservoir or other container more than 40,000 gallons capacity any VOC with a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless the tank, reservoir or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped, with one of the vapor loss control devices listed in RCSA §§22a-174-20(a)(2)(A) through (D). If the control devices specified in RCSA §§22a-174-20(a)(2)(A) or (D) are used to comply with the requirements of this subdivision, then the requirements of RCSA §22a-174-20(a)(8) must also be met. [RCSA §22a-174-20(a)(2)]

##### b. Monitoring and Testing Requirements

- i. 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)]
- ii. The Permittee shall maintain all tank vent control systems, if used, in such a condition as designed to prevent and minimize emissions as allowed by the commissioner and/or in accordance with good engineering practices as specified by the American Society of Mechanical Engineers Vessel Design Codes. [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 used, if applicable. [RCSA §22a-174-33(j)(1)(K)(ii)]

### Section III: Applicable Requirements and Compliance Demonstration

#### 6. Hazardous Air Pollutants [State]

##### a. Limitations or Restrictions

- i. Thermal oxidizer formaldehyde emissions shall not exceed the MASC of 18,097.42  $\mu\text{g}/\text{m}^3$ . [P 092-0016]
- ii. The Permittee shall not cause an exceedance of the MASC for any HAP emitted by GEU-001 and listed in RCSA §22a-174-29. [P 092-0016]

##### b. Monitoring and Testing Requirements

- i. The Permittee shall calculate the MASC of each HAP using the following equations:  
[P 092-0016]

(A) Thermal Oxidizer (from latex production):

$$\text{MASC} = 1,508 \times \text{HLV} \times (5^{-4}((T-0.5)/7.5))$$

(B) Off-Loading 1,3 Butadiene

$$\text{MASC} = 33,544 \times \text{HLV} \times (5^{-4}((T-0.5)/7.5))$$

Where,

MASC = Maximum Allowable Stack Concentration ( $\mu\text{g}/\text{m}^3$  or ppmv)

HLV = Hazard Limiting Value ( $\mu\text{g}/\text{m}^3$  or ppmv)

T = The cumulative hours of operation in an 8-hour period, not to exceed 8 hours

- ii. The Permittee shall derive the ASC of each HAP by using each HAP content as a worst case and any applicable controls from both the thermal oxidizer and off loading. This gives ASC in lb/hr that can be converted to  $\mu\text{g}/\text{m}^3$  using the following equation:  
[P 092-0016]

$$\text{ASC} (\mu\text{g}/\text{m}^3) = \text{Emissions Rate (lb/hr)} \times 453 \times 10^6 / \text{acfm} / 60 / 0.02832$$

##### c. Record Keeping Requirements

- i. The Permittee shall keep records of all compounds used, total hours of operation per day and all Material Safety Data Sheets or technical data sheets. [P 092-0016]
- ii. The Permittee shall maintain records of the calculations required by Section III.A.6.b of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

##### d. Reporting Requirements

The Permittee shall submit a report of any changes and a demonstration of compliance with the limits in Section III.A.6.a of this Title V permit, within 30 days of such changes, to the Connecticut Department of Energy and Environmental Protection, Bureau of Air Management, Engineering Section, 79 Elm Street, Hartford, Connecticut 06106-5127. [P 092-0016]

### Section III: Applicable Requirements and Compliance Demonstration

#### 7. Hazardous Air Pollutants [Federal]

##### a. Limitations or Restrictions

i. The Permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart U. The requirements that follow in Section III.A.7 of this Title V permit address specific requirements from applicable sections of this regulation. In addition, the Permittee shall comply with applicable sections of 40 CFR Part 63 Subpart A as specified in Table 1 of 40 CFR Part 63 Subpart U. [40 CFR Part 63 Subpart U]

ii. Emission Standards – Group 2 Storage Vessels

The Permittee, for each Group 2 storage vessel, shall comply with the record keeping requirement in Section III.A.7.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 §§63.484(c) through (s) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.484(a), 40 CFR §63.119(a)(3)]

iii. Emission Standards – Group 1 Continuous Front-End Process Vents

The Permittee, for each Group 1 Continuous Front-End Process Vent, shall reduce emissions of total organic hazardous air pollutants by 98% by weight. The Permittee shall also comply with any applicable requirements of 40 CFR §§63.113 through 63.118 with the differences noted in 40 CFR §§63.485(b) through (v) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.485(a), 40 CFR §63.113(a)(2)]

iv. Equipment Leak Provisions

The Permittee shall comply with the requirements of 40 CFR Part 63 Subpart H with the differences noted in 40 CFR §§63.502(b) through (m) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.502(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 §§63.484(c) through (s) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.484(a)]

ii. The Permittee shall follow all applicable monitoring and test requirements in 40 CFR §63.114 and 40 CFR §63.116 with the differences noted in 40 CFR §§63.485(b) through (v) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.485(a)]

iii. The Permittee shall follow all applicable monitoring and test requirements in 40 CFR §63.180 with the differences noted in 40 CFR §§63.502(b) through (m) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.502(a)]

### Section III: Applicable Requirements and Compliance Demonstration

#### 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 U. [40 CFR §63.506(b)]
- iii. The Permittee shall maintain the start-up, shutdown and malfunction records required by 40 CFR §63.506(b)(1) and 40 CFR §§63.506(b)(1)(i)(A) through (C). [40 CFR §63.506(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 §§63.484(c) through (s) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.484(a)]
- v. The Permittee shall comply with all applicable record keeping requirements of 40 CFR §63.117 and 40 CFR §63.118 with the differences noted in 40 CFR §§63.485(b) through (v) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.485(a)]
- vi. The Permittee shall comply with all applicable record keeping requirements of 40 CFR §§63.506(d)(1) through (7) for units that require continuous records to be kept. [40 CFR §63.506(d)]
- vii. The Permittee shall comply with the applicable record keeping requirements of 40 CFR §63.181 with the differences noted in 40 CFR §§63.502(b) through (m) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.502(a)]

#### 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 U. [40 CFR §63.506(b)]
- ii. The Permittee, for the purposes of 40 CFR Part 63 Subpart U, shall submit the semiannual startup shutdown and malfunction reports on the same schedule as the periodic reports required under Section III.A.7.d.iii of this Title V Permit. [40 CFR §63.506(b)(1)(ii)]
- iii. The Permittee shall submit periodic reports as specified in 40 CFR §§63.506(e)(6)(i) through (xii). In addition for equipment leaks subject to 40 CFR §63.502, 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 §63.506(e)(6)]
- iv. The Permittee shall submit reports of changes to the primary product for an EPPU or process unit when the conditions of 40 CFR §§63.480(f)(3)(iii), (f)(9), or (f)(10)(iii) are met as required by those sections. [40 CFR §63.506(e)(7)(iv)]

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

- v. The Permittee shall submit a report as specified in 40 CFR §§63.506(e)(7)(v)(A) and (B) if they add an EPPU to a plant site in accordance with 40 CFR §63.480(i)(1) or add emission points or make process changes to the existing source in accordance with 40 CFR §63.480(i)(2). [40 CFR §63.506(e)(7)(v)]
- vi. The Permittee shall comply with the applicable reporting requirements of 40 CFR §63.182 with the differences noted in 40 CFR §§63.502(b) through (m) for the purposes of 40 CFR Part 63 Subpart U. 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 §§63.484(c) through (s) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.502(a), 40 CFR §63.484(a)]
- vii. The Permittee shall comply with all applicable reporting requirements of 40 CFR §63.117 and 40 CFR §63.118 with the differences noted in 40 CFR §§63.485(b) through (v) for the purposes of 40 CFR Part 63 Subpart U. [40 CFR §63.485(a)]

#### **B. EU-008 – Wickes E7C #4 Boiler**

##### **1. Maximum Annual Fuel Consumption**

###### **a. Limitations or Restrictions**

The Permittee shall not consume more than 490,384,800 ft<sup>3</sup> of natural gas or 985,915 gallons of No. 2 Fuel Oil over any consecutive 12 month period. Usage of a combination of fuel types shall be such that the emission limits in Section III.B.3.a of this Title V permit are not exceeded. [P 092-0015]

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

The Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor the fuel consumption rate. [P 092-0015]

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

The Permittee shall record the monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P 092-0015]

##### **2. Maximum Fuel Sulfur Content**

###### **a. Limitations or Restrictions**

The Permittee shall only consume Fuel Oil with sulfur content less than 0.2% by weight, dry basis in EU-008. [P 092-0015]

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

The Permittee shall monitor the sulfur content of the fuel used in EU-008. [P 092-0015]

### Section III: Applicable Requirements and Compliance Demonstration

#### c. Record Keeping Requirements

The Permittee shall keep records of the fuel certification for each delivery of Fuel Oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by EU-008 that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P 092-0015]

### 3. Criteria Pollutant Emissions

#### a. Limitations or Restrictions

The Permittee shall not cause or allow EU-008 to exceed the following emissions limits at any time [P 092-0015]:

Pollutant	Natural Gas		No. 2 Fuel Oil		Maximum Combined Allowable Emissions tpy
	lb/hr	lb/MMBtu	lb/hr	lb/MMBtu	
PM <sub>2.5</sub>	0.43	0.007	0.10	0.002	1.86
PM <sub>10</sub>	0.43	0.007	0.42	0.007	1.86
SO <sub>x</sub>	0.03	0.001	11.79	0.2	14
NO <sub>x</sub>	3.48	0.06	5.76	0.1	15.24
VOC	0.31	0.005	0.08	0.001	1.35
CO	7.2	0.12	7.13	0.12	31.54
Pb	2.80E-05	4.90E-07	5.23E-04	9.06E-06	6.21E-04

#### b. Monitoring and Testing Requirements

- i. The Permittee shall operate and maintain EU-008 in accordance with the manufacturer's specifications and written recommendations. [P 092-0015]
- ii. The Permittee shall properly operate the control equipment at all times that EU-008 is in operation and emitting air pollutants. [P 092-0015]
- iii. The Permittee shall demonstrate compliance with the emissions limits in Section III.B.3.a of this Title V permit by calculating the emission rates using emission factors from the following sources:
  - (A) NO<sub>x</sub>, CO (Natural Gas & No. 2 Fuel Oil): Manufacturer's Data
  - (B) PM<sub>10</sub>/PM<sub>2.5</sub>, SO<sub>x</sub>, VOC, Pb (Natural Gas): AP-42, 5th Edition, Vol. 1, July 1998, Table 1.4-2
  - (C) PM<sub>10</sub>/PM<sub>2.5</sub> (No. 2 Fuel Oil): AP-42, 5th Edition, Vol. 1, September 1998 Table 1.3-6
  - (D) SO<sub>x</sub> (No. 2 Fuel Oil): AP-42, 5th Edition, Vol. 1, September 1998, Table 1.3-1
  - (E) VOC (No. 2 Fuel Oil): AP-42, 5th Edition, Vol. 1, September 1998, Table 1.3-3 (Note: VOC represents Non-methane TOC) [P 092-0015]

### Section III: Applicable Requirements and Compliance Demonstration

- iv. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the emissions limits in Section III.B.3.a of this Title V permit as allowed by state or federal statute, law or regulation. [P 092-0015]

#### c. Record Keeping Requirements

- i. The Permittee shall make and maintain records of all tune-ups, repairs, replacement of parts and other maintenance to EU-008. [P 092-0015]
- ii. The Permittee shall calculate and record the monthly and consecutive 12 month PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>x</sub>, NO<sub>x</sub>, CO, VOC and Pb emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### 4. Hazardous Air Pollutants [State]

##### a. Limitations or Restrictions

The Permittee shall not cause an exceedance of the MASC for any HAP emitted by EU-008 and listed in RCSA §22a-174-29. [P 092-0015]

##### b. Monitoring and Testing Requirements

The Permittee shall calculate the ASC and MASC of each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 and 29-3 that is emitted by EU-008. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K)(ii)]

##### c. Record Keeping Requirements

The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 and 29-3 that is emitted by EU-008. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### 5. Opacity

##### a. Limitations or Restrictions

The Permittee shall not cause EU-008 to exceed 10% opacity during any six minute block average as measured by 40 CFR 60, Appendix A, Reference Method 9. [P 092-0015]

##### b. Monitoring and Testing Requirements

If required by the commissioner, the Permittee shall measure opacity using Title 40 CFR Part 60, Method 9 stack test. [RCSA §22a-174-5(e)(2), 40 CFR §70.6(a)(3), RCSA §22a-174-33(j)(1)(K)(ii)]

### Section III: Applicable Requirements and Compliance Demonstration

#### c. Record Keeping Requirements

The Permittee shall maintain records of the opacity tests required in Section III.B.5.b of this Title V permit. Such records shall include the dates, times, and places of all visible emission observations, persons performing the observations, test methods used, the operating conditions at the time of observation, and the results of such observation. [RCSA §22a-174-4(c)(1)]

#### C. EU-009 – Wickes E7D #3 Boiler

##### 1. Maximum Annual Fuel Consumption

###### a. Limitations or Restrictions

The Permittee shall not consume more than 415,224,000 ft<sup>3</sup> of natural gas or 985,915 gallons of No. 2 Fuel Oil over any consecutive 12 month period. Usage of a combination of fuel types shall be such that the emission limits in Section III.C.3.a of this Title V permit are not exceeded. [P 092-0020]

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

The Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor the fuel consumption rate. [P 092-0020]

###### c. Record Keeping Requirements

The Permittee shall record the monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P 092-0020]

##### 2. Maximum Fuel Sulfur Content

###### a. Limitations or Restrictions

The Permittee shall only consume Fuel Oil with sulfur content less than 0.2% by weight, dry basis in EU-009. [P 092-0020]

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

The Permittee shall monitor the sulfur content of the fuel used in EU-009. [P 092-0020]

###### c. Record Keeping Requirements

The Permittee shall keep records of the fuel certification for each delivery of Fuel Oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by EU-009 that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P 092-0020]

### Section III: Applicable Requirements and Compliance Demonstration

#### 3. Criteria Pollutant Emissions

##### a. Limitations or Restrictions

The Permittee shall not cause or allow EU-009 to exceed the following emissions limits at any time [P 092-0020]:

Pollutant	Natural Gas		No. 2 Fuel Oil		Maximum Combined Allowable Emissions tpy
	lb/hr	lb/MMBtu	lb/hr	lb/MMBtu	
PM <sub>2.5</sub>	0.36	0.007	0.09	0.002	1.58
PM <sub>10</sub>	0.36	0.007	0.35	0.007	1.58
SO <sub>x</sub>	0.03	0.001	9.88	0.203	14
NO <sub>x</sub>	2.84	0.06	4.83	0.1	12.46
VOC	0.26	0.005	0.07	0.001	1.14
CO	5.63	0.12	5.56	0.12	24.66
Pb	2.37E-05	4.90E-07	4.00E-04	8.27E-06	6.21E-04

##### b. Monitoring and Testing Requirements

- i. The Permittee shall operate and maintain EU-009 in accordance with the manufacturer's specifications and written recommendations. [P 092-0020]
- ii. The Permittee shall properly operate the control equipment at all times that EU-009 is in operation and emitting air pollutants. [P 092-0020]
- iii. The Permittee shall demonstrate compliance with the emission limits in Section III.C.3.a of this Title V permit by calculating the emission rates using emission factors from the following sources:
  - (A) NO<sub>x</sub>, CO (Natural Gas & No. 2 Fuel Oil): Manufacturer's Data
  - (B) PM<sub>10</sub>/PM<sub>2.5</sub>, SO<sub>x</sub>, VOC, Pb (Natural Gas): AP-42, 5th Edition, Vol. 1, July 1998, Table 1.4-2
  - (C) PM<sub>10</sub>/PM<sub>2.5</sub> (No. 2 Fuel Oil): AP-42, 5th Edition, Vol. 1, September 1998 Table 1.3-6
  - (D) SO<sub>x</sub> (No. 2 Fuel Oil): AP-42, 5th Edition, Vol. 1, September 1998, Table 1.3-1
  - (E) VOC (No. 2 Fuel Oil): AP-42, 5th Edition, Vol. 1, September 1998, Table 1.3-3 (Note: VOC represents Non-methane TOC) [P 092-0020]
- iv. The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the emission limits in Section III.C.3.a of this Title V permit as allowed by state or federal statute, law or regulation. [P 092-0020]

### Section III: Applicable Requirements and Compliance Demonstration

#### c. Record Keeping Requirements

- i. The Permittee shall make and maintain records of all tune-ups, repairs, replacement of parts and other maintenance to EU-009. [P 092-0020]
- ii. The Permittee shall calculate and record the monthly and consecutive 12 month PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>x</sub>, NO<sub>x</sub>, CO, VOC and Pb emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### 4. Hazardous Air Pollutants [State]

##### a. Limitations or Restrictions

The Permittee shall not cause an exceedance of the MASC for any HAP emitted by EU-009 and listed in RCSA §22a-174-29. [P 092-0020]

##### b. Monitoring and Testing Requirements

The Permittee shall calculate the ASC and MASC of each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 and 29-3 that is emitted by EU-009. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K)(ii)]

##### c. Record Keeping Requirements

The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 and 29-3 that is emitted by EU-009. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### 5. Opacity

##### a. Limitations or Restrictions

The Permittee shall not cause EU-009 to exceed 10% opacity during any six minute block average as measured by 40 CFR 60, Appendix A, Reference Method 9. [P 092-0020]

##### b. Monitoring and Testing Requirements

If required by the commissioner, the Permittee shall measure opacity using Title 40 CFR Part 60, Method 9 stack test. [RCSA §22a-174-5(e)(2), 40 CFR §70.6(a)(3), RCSA §22a-174-33(j)(1)(K)(ii)]

##### c. Record Keeping Requirements

The Permittee shall maintain records of the opacity tests required in Section III.C.5.b of this Title V permit. Such records shall include the dates, times, and places of all visible emission observations, persons performing the observations, test methods used, the operating conditions at the time of observation, and the results of such observation. [RCSA §22a-174-4(c)(1)]

### Section III: Applicable Requirements and Compliance Demonstration

#### D. EU-010 – Fuel Storage – Gasoline Tank and Dispensing Station (D38)

##### 1. Gasoline Throughput

###### a. Limitations or Restrictions

The Permittee shall limit gasoline throughput to less than 10,000 gallons/month.  
[RCSA §22a-174-30(b)]

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

The Permittee shall monitor monthly amounts of fuel throughput for gasoline. A non-resettable fuel-metering device shall be used to continuously monitor the fuel throughput.  
[RCSA §22a-174-33(j)(1)(K)(ii)]

###### c. Record Keeping Requirements

The Permittee shall make and keep records of monthly throughput, which demonstrate dispensing station is not subject to RCSA §§22a-174-30(b)(1), (b)(2), (b)(3), or (b)(4).  
[RCSA §22a-174-30(b)(6)]

##### 2. VOC

###### a. Limitations or Restrictions

The Permittee shall maintain EU-010 with a permanent submerged fill pipe with a discharge point 18 inches or less from the bottom of the storage vessel. [RCSA §22a-174-20(a)(3)]

###### b. Record Keeping Requirements

The Permittee shall maintain records of any alterations to the permanent submerged fill pipe discharge point. [RCSA §22a-174-33(j)(1)(K)(ii)]

###### c. Reporting Requirements

The Permittee shall notify the commissioner if the discharge point of the fill pipe is altered in any way.  
[RCSA §22a-174-33(j)(1)(K)(ii)]

### Section III: Applicable Requirements and Compliance Demonstration

#### E. GEU-011 – Parts Cleaning Operations

##### 1. VOC

###### a. Limitations or Restrictions

The Permittee shall operate each unit in GEU-011 in accordance with the following applicable equipment design and operating standards:

- i. The Permittee shall equip each unit in GEU-011 with a cover that is easily operated with one hand. [RCSA §22a-174-20(I)(3)(A)]
- ii. The Permittee shall equip each unit in GEU-011 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(I)(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(I)(3)(C)]
- iv. The Permittee shall close the cover of each unit in GEU-011 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(I)(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(I)(3)(E)]
- vi. The Permittee shall minimize the drafts across the top of each unit in GEU-011 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(I)(3)(G)]
- vii. The Permittee shall not operate each unit in GEU-011 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(I)(3)(H)]
- viii. The Permittee shall provide a permanent, conspicuous label on or posted near each unit in GEU-011 summarizing the applicable operating requirements. [RCSA §22a-174-20(I)(3)(I)]
- ix. The Permittee shall only use solvent that has a vapor pressure less than or equal to 1.0 mmHg at 20°C. [RCSA §22a-174-20(I)(3)(K)]
- x. The Permittee shall not clean sponges, fabric, wood, leather, paper and other absorbent material in each unit in GEU-011. [RCSA §22a-174-20(I)(3)(L)]

### Section III: Applicable Requirements and Compliance Demonstration

#### b. Monitoring and Testing Requirements

The Permittee shall monitor the monthly amount of solvent added to each unit in GEU-011. [RCSA §22a-174-20(l)(3)(K)]

#### c. Record Keeping Requirements

The Permittee shall maintain the following records:

- i. the type of solvent used, including a description of the solvent and the solvent name;
- ii. the vapor pressure of the solvent in mmHg measured at 20 °C (68 °F);
- iii. the percent VOC content by weight; and
- iv. the amount of solvent added to each unit on a monthly basis. [RCSA §22a-174-20(l)(3)(J)]

#### F. GEU-012 – Emergency Engines

##### 1. Maximum Operating Hours

###### a. Limitations or Restrictions

The Permittee shall not operate each engine in GEU-012 greater than 300 hours during any 12 month rolling aggregate. [RCSA §22a-174-3b(e)(2)(C)]

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

The Permittee shall monitor hours of operation for each engine in GEU-012 on a monthly basis. [RCSA §22a-174-3b(e)(4)]

###### c. Record Keeping Requirements

The Permittee shall maintain records of hours of operation for each engine in GEU-012 on a monthly basis and a 12 month rolling aggregate. Maximum annual operating hours shall be based on any consecutive 12 month time period and shall be determined by adding each month's operating hours to that of the previous 11 months for each engine in GEU-012. [RCSA §22a-174-3b(e)(4)]

##### 2. Maximum Fuel Sulfur Content

###### a. Limitations or Restrictions

The Permittee shall not exceed the sulfur content of motor vehicle diesel fuel where "motor vehicle diesel fuel" is defined as in RCSA §22a-174-42 for any non-gaseous fuel consumed by any engine in GEU-012. [RCSA §22a-174-3b(e)(2)(D)]

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

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

The Permittee shall monitor the sulfur content for the fuel burned for each engine in GEU-012.  
[RCSA §22a-174-3b(h)]

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

The Permittee shall keep any of the following records to demonstrate compliance with Section III.F.2.a of this Title V permit:

- i. A fuel certification for a delivery of nongaseous fuel from a bulk petroleum provider;
- ii. A sales receipt for the sale of motor vehicle diesel fuel from a retail location; or
- iii. A copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment.  
[RCSA §22a-174-3b(h)]

### **3. HAP [Federal]**

The Permittee shall comply with the Sections III.F.3.a through Section III.F.3.d of this Title V permit and any other applicable requirements of 40 CFR Part 63 Subpart ZZZZ by May 3, 2013 for each engine in GEU-012.

#### **a. Limitations or Restrictions**

The Permittee shall meet the following requirements for each engine in GEU-012:

- i. Change the oil and filter every 500 hours of operation or annually, whichever comes first.
- ii. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first.
- iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first.
- iv. During periods of startup, the Permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR §63.6602, 40 CFR §63.6625(h)]

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

- i. The Permittee shall operate and maintain each engine in GEU-012 according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.  
[40 CFR §63.6625(e)]
- ii. The Permittee shall install a non-resettable hour meter on each engine in GEU-012 if one is not already installed on each engine. [40 CFR §63.6625(f)]

### Section III: Applicable Requirements and Compliance Demonstration

- iii. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Section III.F.3.a.i of this Title V permit. The oil analysis must be performed at the same frequency specified for changing the oil in Section III.F.3.a.i of this Title V permit. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within two days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within two days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
- iv. The Permittee shall demonstrate continuous compliance with the operating limitations in Section III.F.3.a of this Title V permit by following all applicable requirements in 40 CFR §63.6640. [40 CFR §63.6640]

#### c. Record Keeping Requirements

- i. The Permittee shall keep a copy of each notification and report that was submitted to comply with 40 CFR Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv). [40 CFR §63.6655(a)(1)]
- ii. The Permittee shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR §63.6655(a)(2)]
- iii. The Permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR §63.6655(a)(5)]
- iv. The Permittee shall keep records demonstrating compliance with Section III.F.3.b.i of this Title V permit. [40 CFR §63.6655(d)]
- v. The Permittee shall keep records of the maintenance conducted on each engine in GEU-012 in order to demonstrate that they were operated and maintained according to the maintenance plan. [40 CFR §63.6655(e)]
- vi. The Permittee shall keep records of the hours of operation of each engine in GEU-012 that is recorded through the non-resettable hour meter on each engine. 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. [40 CFR §63.6655(f)]

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

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

If an engine in GEU-012 is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Section III.F.3.a of this Title V permit, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The Permittee must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR Part 63 Subpart ZZZZ, Table 2c, Footnote 1]

### Section III: Applicable Requirements and Compliance Demonstration

#### G. PREMISES-WIDE GENERAL REQUIREMENTS

<b>TABLE III.G: PREMISES-WIDE GENERAL REQUIREMENTS</b>		
<b>Pollutants or Process Parameters</b>	<b>Applicable Regulatory References/Citations</b>	<b>Compliance Demonstration Requirements</b>
Annual Emission Statements	RCSA §22a-174-4	1. The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4(d)(1).
Emission Testing	RCSA §22a-174-5	2. The Permittee shall comply with the procedures for sampling, emission testing, sample analysis, and reporting as set forth in RCSA §22a-174-5.
Emergency Episode Procedures	RCSA §22a-174-6	3. The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
Reporting of Malfunctioning Control Equipment	RCSA §22a-174-7	4. The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
Prohibition of Air Pollution	RCSA §22a-174-9	5. The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
Public Availability of Information	RCSA §22a-174-10	6. The public availability of information shall apply, as set forth in RCSA §22a-174-10.
Prohibition Against Concealment/ Circumvention	RCSA §22a-174-11	7. The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
Violations and Enforcement	RCSA §22a-174-12	8. The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
Variances	RCSA §22a-174-13	9. The Permittee may apply to the commissioner for a variance from one or more of the provisions of these regulations as set forth in RCSA §22a-174-13.
No Defense to Nuisance Claim	RCSA §22a-174-14	10. The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.
Severability	RCSA §22a-174-15	11. The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
Responsibility to Comply	RCSA §22a-174-16	12. The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
Particulate Emissions	RCSA §22a-174-18	13. The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18. (Section 18 approved by EPA on 9-23-1982, current Regulation submitted to EPA on 12-1-2004.)
Sulfur Compound Emissions	RCSA §22a-174-19	14. The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §22a-174-19.
Organic Compound Emissions	RCSA §22a-174-20	15. The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
Carbon Monoxide Emissions	RCSA §22a-174-21	16. The Permittee shall comply with the requirements for control of carbon monoxide emissions as set forth in RCSA §22a-174-21.
Nitrogen Oxide Emissions	RCSA §22a-174-22	17. The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22.

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

<b>TABLE III.G: PREMISES-WIDE GENERAL REQUIREMENTS</b>		
<b>Pollutants or Process Parameters</b>	<b>Applicable Regulatory References/Citations</b>	<b>Compliance Demonstration Requirements</b>
Emission Fees	RCSA §22a-174-26	18. The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
Hazardous Air Pollutants	RCSA §22a-174-29	19. The Permittee shall comply with the requirements for hazardous air pollutant emissions as set forth in RCSA §22a-174-29.
Asbestos	40 CFR Part 61 Subpart M	20. The Permittee shall comply with all applicable requirements of 40 CFR Part 61 Subpart M.
Organic Liquid Distribution (Non-Gasoline)	40 CFR Part 63 Subpart EEEE	21. The Permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart EEEE.
Site Remediation	40 CFR Part 63 Subpart GGGGG	22. The Permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart GGGGG.
Chemical Accident Provisions	40 CFR Part 68	23. The Permittee shall comply with all applicable requirements of 40 CFR Part 68.

**Section IV: Compliance Schedule**

<b>TABLE IV: COMPLIANCE SCHEDULE</b>				
<b>Emissions Unit</b>	<b>Applicable Regulations</b>	<b>Steps Required for Achieving Compliance (Milestones)</b>	<b>Date by which Each Step is to be Completed</b>	<b>Dates for Monitoring, Record Keeping, and Reporting</b>
<b>Not Applicable</b>				

## 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.

- 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. 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.
- D. 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.
- E. Hazardous Air Pollutants: The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- F. Open Burning: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
- G. Fuel Sulfur Content: The Permittee shall not use No. 2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS §16a-21a.

**Section VI: Permit Shield**

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

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

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

<b>TABLE VI: PERMIT SHIELD</b>				
<b>Regulated Pollutants</b>	<b>Emissions Unit</b>	<b>Applicable Requirement or Non-Applicable Requirement Descriptions</b>	<b>Applicable Regulatory References</b>	<b>*Applicability</b>
<b>No Permit Shield Granted</b>				

## Section VII: Title V Requirements

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

### A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

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

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

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

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

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

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

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

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

## Section VII: 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:
  - a. 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,
  - b. 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
  - c. If a duly authorized representative is a named individual in an authorization submitted under subclause ii. of this subparagraph and a different individual is assigned or has assumed the responsibilities of the duly authorized representative, or, if a duly authorized representative is a named position in an authorization submitted under subclause ii. of this subparagraph and a different named position is assigned or has assumed the duties of the duly authorized representative, a new written authorization shall be submitted to the commissioner prior to or together with the submission of any application, document, report or certification signed by such representative.

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

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

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

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

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

1. Each deviation caused by upset or control equipment deficiencies; and
2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this 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 VII: 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 VII: Title V Requirements

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

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

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

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

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

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

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

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

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

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

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

This Title V permit shall not be deemed to:

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

## Section VII: 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 VII: 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 VII: 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.



**Technical Support Document  
Addendum**

*Styron LLC  
1761 Route 12  
Gales Ferry, CT 06335*

Permit No.: 092-0028-TV  
SIMS No.: 201005413

**COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY**

Styron LLC has no units that are subject to the Compliance Assurance Monitoring requirements under 40 CFR Part 64.

<b>Emissions Unit</b>	<b>Description</b>	<b>Subject to Emission Limitation or Standard?</b>	<b>Emission Limitation or Standard Subject to</b>	<b>Is Emission Limitation or Standard Exempt Under 40 CFR 64.2(b)(1)?</b>	<b>Use a Control Device to Achieve Compliance?</b>	<b>Have Potential Pre-control Emissions of at Least 100% of Major Source Amount?</b>	<b>Pollutant-Specific Unit</b>	<b>Subject to the CAM Rule?</b>
GEU-001	Latex Production	Yes	40 CFR Part 63, Subpart U	Yes	Yes, Thermal Oxidizer	Yes	VOC/HAP	No, Exempt Under 40 CFR 64.2(b)(1)
All other units at facility have pre-control emissions less than 100% of the major source amount and are not subject to CAM								

CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION  
BUREAU OF AIR MANAGEMENT

Connecticut Title V Operating Permit  
Technical Support Document

*Styron LLC  
1761 Route 12  
Gales Ferry, CT 06335*

Permit No.: 092-0028-TV  
SIMS No.: 201005413

/s/ Louis J. Corsino  
Louis J. Corsino III  
Air Pollution Control Engineer

6/26/2011  
Date

APPROVALS:

/s/ Susan E. Amarello  
Susan E. Amarello  
Supervising Air Pollution Control Engineer

11/18/2011  
Date

/s/ Richard A. Pirolli  
Richard A. Pirolli  
Assistant Director

11/23/2011  
Date

## PREMISES DESCRIPTION

Styron, LLC (Styron) owns the premises at 1761 Route 12, Gales Ferry, CT (Allyn's Point). A portion of the premises is leased to The Dow Chemical Company (Dow) and Americas Styrenics, LLC (AmSty).

In May 2008 AmSty was formed as a 50/50 joint venture between Dow Chemical Company and Chevron Phillips Chemical Company, LLC. The AmSty facility was carved out of and is located on the same Allyn's Point premises as Dow. On June 23, 2008, relevant NSR permits were transferred from Dow to AmSty. The CT DEP determined, on June 19, 2009, that Dow and AmSty constituted a single source under common control pursuant to the Clean Air Act and the companies had the option of obtaining one Title V permit for the entire premises or individual Title V permits for each company. The determination of common control was based on the fact that the companies met the three primary criteria for such a determination: sharing the same SIC code, located on contiguous and adjacent properties, and under common control (due to Dow being one half of the 50/50 AmSty joint venture).

Dow and AmSty decided to obtain separate Title V permits and on September 18, 2009, AmSty submitted a Title V permit application.

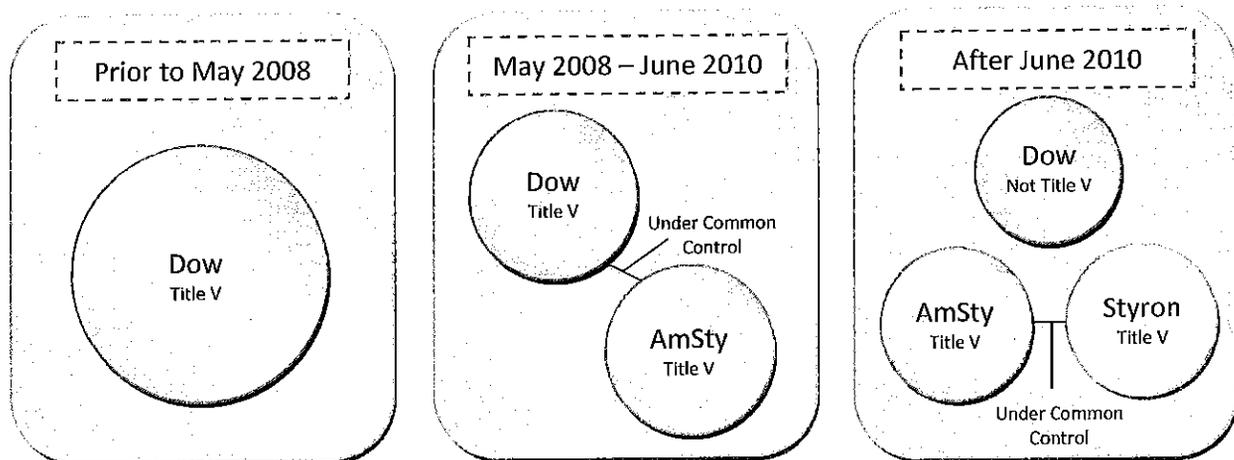
In June 2010 Dow divested parts of its operation and those divested operations became Styron, LLC (Styron), now the third company located at the Allyn's Point premises. As part of the transaction Dow also transferred its 50% joint venture interest in AmSty to Styron. After the transfer, Dow retained a 7.5% equity position in Styron and a 3.75% indirect ownership interest in AmSty.

Styron and AmSty have an SIC code of 2821 (Plastics Materials, Synthetic Resins, and Nonvulcanizable Elastomers) while Dow's SIC code is 3086 (Plastics Foam Products).

Styron and AmSty now constitute a single source under common control pursuant to the Clean Air Act because Styron holds a 50% joint venture interest in AmSty, they share the same SIC code and are located on the same contiguous premises. The companies had the option of obtaining one Title V permit for the entire premises or individual Title V permits for each company. Styron and AmSty have chosen to obtain separate Title V permits.

Dow is not considered part of this stationary source because they only meet one out of the three criteria for being classified as part of the same stationary source as AmSty and Styron.

### Allyn's Point premises over the years



## TITLE V APPLICABILITY

Styron is a Title V source located in a serious ozone non-attainment area defined in RCSA §22a-174-1(101).

Styron, by itself, does not have potential emissions that exceed the major source thresholds for any pollutant. Because Styron and AmSty are considered a single stationary source under the Clean Air Act, their emissions must be looked at collectively for permitting purposes. Emissions from both companies combined exceed major source thresholds for NO<sub>x</sub> as shown in the table below.

<u>Pollutant</u>	<u>Styron Total</u> <u>PTE (tpy)</u>	<u>AmSty Total</u> <u>PTE (tpy)</u>	<u>Styron + Amsty</u> <u>Total (tpy)</u>	<u>Major Source</u> <u>Threshold</u>	<u>Major</u> <u>Source?</u>
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	6.6	71.17	77.77	100	No
SO <sub>x</sub>	28.26	17.17	45.43	100	No
NO <sub>x</sub>	32.44	21.91	54.35	50	Yes
VOC	9.12	7.48	16.60	50	No
CO	57.94	7.77	65.71	100	No
Styrene	1.55	3.2	4.75	10	No
Ethyl Benzene	0	1.9	1.9	10	No
1,3 Butadiene	1.28	0	1.28	10	No
Ethyl Acrylate	1.2	0	1.2	10	No
Acrylic Acid	0.9	0	0.9	10	No
Total HAP	9.12	7.48	16.6	25	No

Regardless of the emissions above, Styron is considered a Title V source, pursuant to RCSA §22a-174-33(a)(10)(B), because they operate units subject to 40 CFR Part 63 and are not otherwise exempt or deferred from the requirement to obtain a Title V permit.

## EMISSIONS UNIT SUMMARY

### GEU-001 – Latex Production

GEU-001 is subject to 40 CFR Part 63 Subpart U “National Emission Standards for Hazardous Air Pollutants (NESHAP) for Group IV Polymer and Resins.” Certain applicable provisions from 40 CFR Part 63 Subpart H “NESHAP for Equipment Leaks,” and Subpart G “NESHAP for Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater” apply via Subpart U.

For purposes of Subpart U, GEU-001 contains only one Group 2 storage vessel (EU-003) and one Group 1 continuous front-end process vent (EU-001C). GEU-001 is also subject to the fugitive leak provisions of the subpart. GEU-001 contains no batch front-end process vents, aggregate batch vents, process wastewater or back-end process operations that meet the definitions of such in Subpart U.

GEU-001 is subject to VOC RACT State Order No. 8011 for the Latex plant and storage vessels.

The Latex production operation also operates under NSR permit 092-0016. This permit also contains conditions for operating the thermal oxidizer which controls emissions from the Latex production.

**EU-007 – Acrylonitrile Storage Tank (D38)**

The applicable requirements set forth in the Title V permit for EU-007 come from State Order 8011 which references RCSA §22a-174-20(a)(2).

**EU-008 – Wickes E7C #4 Boiler**

The applicable requirements set forth in the Title V permit for EU-008 come from New Source Review permit 092-0015.

**EU-009 – Wickes E7D #3 Boiler**

The applicable requirements set forth in the Title V permit for EU-009 come from New Source Review permit 092-0020.

**EU-010 – Fuel Storage – Gasoline Tank and Dispensing Station (D38)**

The applicable requirements set forth in the Title V permit for EU-010 come from RCSA §22a-174-30(b) and RCSA §22a-174-20(a)(3).

**GEU-011 – Parts Cleaning Operations**

The applicable requirements set forth in the Title V permit for GEU-011 come from RCSA §22a-174-20(l)(3) because the units are cold cleaning units using mineral spirits and aqueous cleaning solutions.

**GEU-012 – Emergency Engines**

The applicable requirements set forth in the Title V permit for GEU-012 come from RCSA §22a-174-3b(e) because the engines are being operated under the permit by rule for emergency engines. The emergency engines are also subject to 40 CFR Part 63 Subpart ZZZZ and must comply with those applicable requirements by May 3, 2013.

**GEU-013 – Fuel Storage Tanks**

GEU-013 stores No. 2 fuel oil with a vapor pressure less than 1.5 psia. Therefore, RCSA §22a-174-20(a) does not apply. These tanks also have capacities less than 75 m<sup>3</sup>. Therefore 40 CFR Part 60, Subpart Kb does not apply to these tanks.

**EU-014 – Styrene Unload Rack and Storage Tanks - D1, D2, and D3**

EU-014 has no applicable requirements at this time because the vessels store a VOC with a vapor pressure less than 1.5 psia.

**EU-015 – Latex Cooling Tower**

**EU-016 – Latex Waste Water Treatment Plant**

**EU-017 – Ethylene Glycol Supply Line and Refrigeration Units**

**EU-018 – Various Latex Process Filters**

EU-015 through EU-018 have no applicable requirements at this time.

## Gapfilling

40 CFR §70.6(a)(3) requires that all monitoring and analysis procedures or test methods required under applicable requirements be contained in the Title V operating permit. In addition, where the applicable requirement does not specify periodic testing or monitoring, periodic monitoring that is sufficient to show the source's compliance with the requirement must be prescribed.

Gap-filling was used wherever there were deficiencies in demonstrating compliance with applicable requirements. Such deficiencies were commonly found when applicable requirements came from New Source Review permits or from provisions set forth in the RCSA.

## COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY

Styron has no units that are subject to the Compliance Assurance Monitoring requirements under 40 CFR Part 64.

## COMPLIANCE HISTORY

This facility was last inspected in July 2011. The inspecting engineer's "Premises Evaluation Report" is attached and indicates that no violations were discovered during the inspection.

The Compliance Report Evaluation Title V Compliance Certification document signed and dated on October 3, 2011 and covering the reporting period of January 1, 2010 to December 31, 2010 indicates that the facility is operating in compliance with the previously issued Dow Title V permit. The Compliance Report Evaluation is attached to this report.

In addition to the above, the compliance record was reviewed in accordance with the Environmental Compliance History Policy. The applicant's submitted compliance information form was reviewed along with agency records for information to evaluate the applicant's compliance history and the relevance of such history to the activity for which authorization is being sought. Additionally, a review of air program compliance was requested from the Enforcement Section and that response forms a part of this record.

## STREAMLINING PERMIT FOR OUTDATED SIP REQUIREMENTS

Connecticut is using this Title V permit to streamline state adopted rules with EPA-approved Connecticut regulations found at 40 CFR §52.385.

EPA provides general guidance in White Paper 2 ([Development of Applications and Permits for outdated SIP requirements](#)) for simplifying permits where a source is subject to both a state adopted rule that is pending SIP approval and the approved SIP version of that rule. Connecticut state rules are as stringent as or more stringent than the current SIP for subject sources in this Title V permit, except as noted in Table 1.

Pending SIP requirements are state-enforceable only and become federally enforceable upon EPA approval of the SIP. State rules not submitted as a part of the Connecticut SIP remain state-enforceable only.

Consistent with section 504(a) of the Clean Air Act, the Title V permits need only contain emission limits and other terms and conditions as needed to assure compliance with the applicable requirement.

**Table 1: Comparison of SIP with Current State Regulations**

<b>Topic of Regulation</b>	<b>SIP</b>	<b>Current Regulation</b>	<b>Current Regulation at Least as Stringent as SIP</b>
Emission Testing	19-508-5	22a-174-5	Yes, test methods have been improved since SIP was adopted.
Air Pollution Emergency	19-508-6	22a-174-6	Yes, action levels are equivalent.
Reporting of Malfunctioning Control Equipment	19-508-7	22a-174-7	Yes, notification provisions are more stringent.
Prohibition of Air Pollution	19-508-9	22a-174-9	Yes, state rule expands prohibited activities.
Public Availability of Information	19-508-10	22a-174-10	Yes, definition of confidential information and the ability to charge a fee are the same in both rules.
Prohibition Against Concealment or Circumvention	19-508-11	22a-174-11	Yes, requirements are equivalent.
Violations and Enforcement	19-508-12	22a-174-12	Yes, state rule adds requirement of progress reports.
Variances	19-508-13	22a-174-13	Yes, state rule is an exact replica of SIP.
No Defense to Nuisance Claim	19-508-14	22a-174-14	Yes, state rule is an exact replica of SIP.
Severability	19-508-15	22a-174-15	Yes, state rule is an exact replica of SIP.
Responsibility to Comply	19-508-16	22a-174-16	Yes, state rule is an exact replica of SIP.
Control of Open Burning	19-508-17	22a-174-17	No, current state rule allows more activities for open burning.
Control of Particulate Emissions	19-508-18	22a-174-18	No, current rule (Section j) allows alternative opacity standards for emission units equipped with continuous opacity monitors.
Control of Sulfur Compounds	19-508-19	22a-174-19	Yes, state rule is as at least as stringent as SIP.
Control of Sulfur from Power Plants		22a-174-19a	There is no equivalent provision in current SIP.
Control of Volatile Organic Compounds	19-508-20	22a-174-20	Yes, state rule is as at least as stringent as SIP.

<b>Topic of Regulation</b>	<b>SIP</b>	<b>Current Regulation</b>	<b>Current Regulation at Least as Stringent as SIP</b>
Control of Carbon Monoxide	19-508-21	22a-174-21	Yes, state rule is an exact replica of SIP.
Primary and Secondary Standards	19-508-24	22a-174-24	SIP is outdated. Air quality standards do not have to be a permit condition.
Effective Date	19-508-25	22a-174-25	Yes, state rule is an exact replica of SIP.

