



## TITLE V OPERATING PERMIT

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and §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>	189-0136-TV
<b>Client/Sequence/Town/Premises Numbers</b>	6565/1/189/27
<b>Date Issued</b>	January 4, 2005
<b>Expiration Date</b>	Five (5) Years from issuance date

**Corporation:**

Cytec Industries Inc.

**Premises location:**

South Cherry Street, Wallingford CT 06492

**Name of Responsible Official and Title:**

Michele Miller, Wallingford Site Manager

All the following attached pages, 2 through 51, are hereby incorporated by reference into this Title V Operating Permit.

GINA McCARTHY  
Gina McCarthy  
Commissioner

1/4/05  
Date

## TABLE OF CONTENTS

<b>Section I.</b>	Premises Information/Description <ul style="list-style-type: none"><li>A. Premises Information</li><li>B. Premises Description</li></ul>
<b>Section II.</b>	Emission Units Information: SOS and AOS <ul style="list-style-type: none"><li>A. Emission Units Identification: SOS and AOS<ul style="list-style-type: none"><li>1. Emission Units Description - Table II.A.1</li><li>2. Emission Units Identification: SOS and AOS - Table II.A.2</li></ul></li></ul>
<b>Section III.</b>	Applicable Requirements and Compliance Demonstration <ul style="list-style-type: none"><li>A. Grouped Emission Unit 1 - Table III.A</li><li>B. Grouped Emission Unit 2 - Table III.B</li><li>C. Emission Unit S02-5 - Table III.C</li><li>D. Emission Unit S02-9 - Table III.D</li><li>E. Emission Unit S02-13 - Table III.E</li><li>F. Grouped Emission Unit 3 - Table III.F</li><li>G. Grouped Emission Unit 4 - Table III.G</li><li>H. Emission Unit R02-3 - Table III.H</li><li>I. Grouped Emission Unit 5 - Table III.I</li><li>J. Grouped Emission Unit 6 - Table III.J</li><li>K. Premise-Wide General Requirements – Table III.K</li><li>L. 112(r) Accidental Release Requirements</li><li>M. Asbestos Requirement</li><li>N. Emission Limitations</li><li>O. Batch Processes Act Requirements</li></ul>
<b>Section IV.</b>	Compliance Schedule - Table IV
<b>Section V.</b>	State Enforceable Terms and Conditions
<b>Section VI.</b>	Permit Shield - Table VI (not applicable)
<b>Section VII.</b>	Title V Requirements <ul style="list-style-type: none"><li>A. Submittal to the Commissioner &amp; Administrator</li><li>B. Certifications [RCSA §22a-174-33(b)]</li><li>C. Signatory Responsibility [RCSA §22a-174-2a(a)]</li><li>D. Additional Information [RCSA §22a-174-33(j)(1)(X)]</li><li>E. Monitoring Reports [RCSA §22a-174-33(o)(1)]</li><li>F. Premises Records [RCSA §22a-174-33(o)(2)]</li><li>G. Progress Reports [RCSA §22a-174-33(q)(1)]</li><li>H. Compliance Certifications [RCSA §22a-174-33(q)(2)]</li><li>I. Permit Deviation Notifications [RCSA §22a-174-33(p)]</li><li>J. Permit Renewal [RCSA §22a-174-33(j)(1)(B)]</li><li>K. Operate in Compliance [RCSA §22a-174-33(j)(1)(C)]</li><li>L. Compliance with Permit [RCSA §22a-174-33(j)(1)(G)]</li><li>M. Inspection to Determine Compliance [RCSA §22a-174-33(j)(1)(M)]</li><li>N. Permit Availability</li><li>O. Severability Clause [RCSA §22a-174-33(j)(1)(R)]</li><li>P. Need to Halt or Reduce Activity [RCSA §22a-174-33(j)(1)(T)]</li><li>Q. Permit Requirements [RCSA §22a-174-33(j)(1)(V)]</li><li>R. Property Rights [RCSA §22a-174-33(j)(1)(W)]</li><li>S. Alternative Operating Scenario Records [RCSA §22a-174-33(o)(3)]</li></ul>

## **TABLE OF CONTENTS, continued**

### **Section VII.** Title V Requirements, continued

- T. Operational Flexibility and Off-permit Changes [RCSA §22a-174-33(r)(2)]
- U. Information for Notification [RCSA §22a-174-33(r)(2)(A)]
- V. Transfers [RCSA §22a-174-2a(g)]
- W. Revocation [RCSA §22a-174-2a(h)]
- X. Reopening for Cause [RCSA §22a-174-33(s)]
- Y. Credible Evidence

## LIST OF ACRONYMS

<i>Acronym</i>	<i>Description</i>
acfm	Actual cubic feet per minute
ASC	Actual Stack Concentration
BACT	Best Available Control Technology
BAM	Bureau of Air Management
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CP/OP	Construction Permit/Operating Permit
CTG	Control Technology Guideline
DEP	Department of Environmental Protection
DERC	Discrete Emission Reduction Credit
dscf	Dry standard cubic feet
dscm	Dry standard cubic meters
EU	Emission Unit
ERC	Emission Reduction Credit
EPA	Environmental Protection Agency
FLER	Full load emission rate
GEU	Grouped Emission Unit
GPEE	General Permit to Construct and/or Operate a New or Existing Emergency Engine
gph	Gallons per hour
gpm	Gallons per minute
HAP	Hazardous Air Pollutant
HLV	Hazard Limiting Value
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MASC	Maximum Allowable Stack Concentration
MSDS	Material Safety Data Sheet
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSR	New Source Review
PM <sub>10</sub>	Particulate Matter, < 10 microns in size
ppmv	Parts per million, volumetric basis
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
RCSA	Regulations of Connecticut State Agencies
RMP	Risk Management Plan
SIC	Source Identification Code
SIP	State Implementation Plan
SO	State Order
SO <sub>x</sub>	Sulfur Oxides
TOC	Total Organic Carbon
tph	Tons per hour
tpy	Tons per year
TSP	Total Suspended Particulate
VOC	Volatile Organic Compound

## **Title V Operating Permit**

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

## Section I: Premises Information and Description

### A. PREMISES INFORMATION

Nature of Business:                      Plastics materials and resins  
Primary SIC:                              2821

Facility Mailing Address:              Cytec Industries Inc.  
    POB 425  
    Wallingford, Connecticut 06492

Telephone Number:                      (203) 284-4388

### B. PREMISES DESCRIPTION

Cytec Industries Inc. (Cytec) is a research-based chemical company, which develops and manufactures proprietary products and technology. In December 1993, Cytec acquired substantially all of the chemical manufacturing operations of American Cyanamid Company (now known as Wyeth Holdings Corporation), including those operations at the Wallingford site. Cytec develops, manufactures and markets specialty chemicals, specialty materials and building block chemicals, serving a broad group of end users, including the water treatment, paper, mining, coatings, plastics, aerospace and automotive industries. Cytec and its subsidiaries operate sites in North America, South America, Europe and Asia.

Approximately 310 people are employed at the Wallingford site. The site is located on 250 acres extending from the railroad main line on the east to the Quinnipiac River on the west. It constitutes 32 buildings, two miles of streets and roads and totals 3.2 miles around its perimeter. The primary activities conducted at the site are classified under the Standard Industrial Classification (SIC) code 2821. The Wallingford site, considered critical to Cytec's core business, manufactures two distinct types of products from two separate production departments.

The categories manufactured at the site are:              Thermoplastic molding compounds  
   Liquid and spray-dried resins

Thermoplastics operations began in 1956. This business unit is called CYRO Industries (CYRO). CYRO is a joint venture between Rohacryl, Inc., a subsidiary of Rohm GmbH, Germany and Cytec Plastics Inc., a subsidiary of Cytec Industries Inc. A variety of everyday products are manufactured with CYRO's thermoplastic material, including instrument panel covers, battery cases and decorative trim for a wide variety of uses. It also is widely used in the food packaging industry for such things as plastic tubs for margarine, blister packs for crackers and cookies, crisper trays and butter compartments in refrigerators. Other uses include fishing tackle boxes and trays, artificial lures, piano keys and toys. Some material is fabricated into signs, greenhouses, solar panel coverings and window and door glazing. In addition, a very high grade material is used in the medical field to produce various devices for transfer and purification of blood.

The Cytec Resins Department began operations in 1943 and today produces several product lines evident in daily life. Paper products resins add wet or dry strength properties and increase the absorbency of such paper items as bags, towels, tissues, maps, money and disposable diapers.

Cytec's laminated resins are used to produce beautiful hard surfaces for counter tops, cabinets and furniture, while textile resins give today's clothing its wrinkle and water resistance and its permanent press characteristics.

Methylated resins provide automotive and appliance manufacturers with more cost-effective coatings for finishing their products.

Besides the two manufacturing areas, Cytec operates a wastewater treatment plant that treats effluent from the two manufacturing area and a boiler house that supplies steam to all parts of the site. The premises is a Title V source for a number of reasons including, but not limited to, the fact that its emissions are greater than major source threshold levels.

## Section II: Emissions Units Information

### A. EMISSIONS UNITS IDENTIFICATION: STANDARD OPERATING SCENARIO (SOS)

Emission units are set forth in Table II.A.1.

TABLE II.A.1: EMISSION UNIT DESCRIPTION			
Emission Units	Emission Unit Description	Control Unit Description	Permit (P), Order (O), or Registration (R) Number*
EU-C01-1	Tank 110-101A: Polybutadiene Latex Emulsion		
EU-C01-2	Tank 110-101B: Polybutadiene Latex Emulsion		
EU-C01-3	B-10 Toluene Rec Waste Toluene Tank TA-520 (UST)		
EU-C01-4	Tank 950: Methyl Methacrylate		<del>P-189-0098</del> revoked
EU-C01-5	Tank 951: Acrylonitrile		<del>P-189-0097</del> revoked
EU-C01-6	Tank 952: Methyl Methacrylate		<del>P-189-0098</del> revoked
EU-C01-7	Tank 953: Rec'd Toluene (UST)		
EU-C01-8	Tank 954: sump		
EU-C01-9	Tank 955: CY Rec'd Toluene (UST)		
EU-C01-10	Tank 956: Styrene (UST)		
EU-C01-11	B-10 XT Rec'd Toluene Tank T-957 (UST)		
EU-C01-12	Tank 958: Toluene (UST)		
EU-C01-13	B-10 XT Dist Toluene Tank T-959 (UST)		
EU-C01-14	Tank 960: Ethyl Acrylate (UST)		
EU-C02-1	B-10 #3 Furnace		
EU-C02-2	B-22 Small Dinamec Breaker Plate Oven		
EU-C02-3	B-22 Large Dinamec Breaker Plate Oven		
EU-C03-1	B-10 Blend Tank BR-120	10CA6046, condenser	R-189-0218
EU-C03-2	B-10 Blend Tank BR-201	10CA6046, condenser	R-189-0218
EU-C03-3	<del>B-10 Blend Tank BR-202</del> Out of service	10CA6046, condenser	R-189-0219
EU-C03-4	B-10 Blend Tank BR-501	10CA6046, condenser	<del>P-189-0020</del> revoked
EU-C03-5	B-10 Blend Tank BR-513/513A	10CA6046, condenser	
EU-C03-6	B-10 Feed Tank 201A	10CA6046, condenser	
EU-C03-7	B-10 Feed Tank BR-501A	10CA6046, condenser	
EU-C03-8	B-10 Feed Tank 513A	10CA6046, condenser	
EU-C03-9	B-10 Feed Tank 516	10CA6046, condenser	
EU-C04-1	B-10 EX-102 Vertical Blender Vent To C/A	10CA6046, condenser	<del>P-189-0014</del> revoked
EU-C04-2	B-10 EX-302 Vertical Blender Vent To C/A	10CA6046, condenser	R-189-0213
EU-C04-3	B-10 EX-402 Vertical Blender Vent To C/A	10CA6046, condenser	R-189-0214
EU-C04-4	<del>B-10 EX-502 Vertical Blender Vent To C/A</del> Removed	10CA6046, condenser	<del>P-189-0020</del> revoked
EU-C04-5	Extruder Hub Seals	10CA6046, condenser	
EU-C04-6	Extruder Die Heads	10CA6046, condenser	
EU-C04-7	Extruder Vacuum Zones	10CA6046, condenser	
EU-C04-8	B-10 Prebody Reactor RE100	10CP100, condenser	R-189-0221
EU-C04-9	B-10 B-Tower Reactor RE102B	10CP102B, condenser	R-189-0223
EU-C04-10	B-10 Prebody Reactor RE300	10CP300, condenser	R-189-0222
EU-C04-11	B-10 B-Tower Reactor RE301B	10CP301B, condenser	R-189-0224
EU-C04-12	B-10 B-Tower Reactor RE302B	10CP302B, condenser	R-189-0224
EU-C04-13	B-10 Prebody Reactor RE400	10CP400, condenser	<del>P-189-0014</del> revoked
EU-C04-14	B-10 B-Tower Reactor RE402B	10CP402B, condenser	<del>P-189-0014</del> revoked
EU-C04-15	<del>B-10 Prebody Reactor RE502</del> Out of service	10CP502, condenser	<del>P-189-0020</del> revoked
EU-C04-16	<del>B-10 B-Tower Reactor RE502B</del> Out of service	10CP502B, condenser	<del>P-189-0020</del> revoked
EU-C04-17	Extruder 102 Zone1		
EU-C04-18	Extruder 502 Zone1		
EU-C04-19	Extruder 302 Zone1		
EU-C04-20	Extruder 302 Zone2		
EU-C04-21	Extruder 402 Zone1		<del>P-189-0014</del> revoked
EU-C05-1	B-10 Grafted Latex Centrifuge 1260		
EU-C05-2	B-10 Grafted Latex Centrifuge 1260A		
EU-C05-3	<del>B-10 Grafting Rubber Blend Tank BR-207</del> Out of service		R-189-0215
EU-C05-4	<del>B-10 Grafting Rubber Blend Tank BR-208</del> Removed		R-189-0216

## Section II: Emissions Units Information

TABLE II.A.1: EMISSION UNIT DESCRIPTION			
Emission Units	Emission Unit Description	Control Unit Description	Permit (P), Order (O), or Registration (R) Number*
EU-C05-5	B-10 Monomer Mix Tank BR-2200		R-189-0217
EU-C05-6	<del>B-10 Grafting Latex Hold Tank TA-2204</del> Out of service		R-189-0220
EU-C05-7	B-10 A/O Sol'n Prep Tank BR-2205		
EU-C05-8	B-10 A/O Emulsion Blend Tank BR-2209		
EU-C05-9	B-10 Grafting Rubber Latex Head Box 1240		
EU-C05-10	B-10 Grafting Rubber Hapman Tank 1250		
EU-C05-11	B-10 A/O Emulsion Hold Tank TA-2209		
EU-C05-12	PBD Blowers		
EU-C06-1	Carbon Adsorption Regeneration	10CP6046, condenser	R-189-0214
EU-C06-2	B-10 XT Recovery Sys Tank DE-301		
EU-C06-3	B-10 XT Recovery Sys Tank DE-502		
EU-C06-4	B-10 XT Recovery Sys Tank DE-602		
EU-C06-5	B-10 XT Recovery Sys Tank DE-603		
EU-C06-6	B-10 Cyrolite Recovery Sys Tank DE-700		
EU-C06-7	B-10 XT Recovery Sys Tank DE-702		
EU-C06-8	B-10 XT Recovery Sys Tank DE-703		
EU-C06-9	B-10 XT Recovery Sys Tank DE-707		
EU-C06-10	B-10 XT Recovery Sys Tank DE-708		
EU-C06-11	B-10 XT Recovery Sys Tank TA-800		
EU-C06-12	B-10 Toluene Recovery Still Purge Tank TA-100-4		
EU-C06-13	B-10 XT Recovery Sys DE-707 Overflow Tank 140-204		
EU-C06-14	B-10 Toluene Recovery System Tank TA-802	10CP6046, condenser	R-189-0233
EU-C07-1	B-10 Cyrolite Dye Prep Tank 209		
EU-C07-2	B-10 Dye Prep Blend Tank BR-2206		
EU-C07-3	B-10 XT Irgafos & Dye Prep Tank TA-2210	10CP6046, condenser	
EU-C07-4	B-10 Dye Prep Feed Tank 209A		
EU-C07-5	B-10 XT Dye Prep Feed Tank TA-2206		
EU-C07-6	B-10 XT Irgafos & Dye Drums		
EU-C07-7	B-10 XT BHT Solution Drums		
EU-C08-1	B-10 1007 Post Color Extruder		
EU-C08-2	B-10 1008 Post Color Extruder		
EU-C08-3	B-10A Lab Extruder Process		
EU-C08-4	B-10 QC Lab Arburg Mold		
EU-C09-1	Equipment Leak Fugitives		
EU-C10-1	PP WGH DRMS		
EU-C10-2	PP Prebody		
EU-C10-3	PP B-Tower		
EU-C10-4	PP VP		
EU-C10-5	PP DS-1		
EU-C10-6	PP ST-1		
EU-C10-7	PP RX-1		
EU-C10-8	PP RX-2		
EU-C10-9	PP Blend Tanks		
EU-C11-1	B-10 Cyro Cooling Tower		
EU-C12-1	Cyro Technical Service Center, Lab Scale Equipment		
EU-R01-1	Tank 101-15 - Glyoxal		
EU-R01-2	NMA Product Tank 104-51	WS104-51, wet scrubber	
EU-R01-3	Tank 627-1: Acrylamide		
EU-R01-4	CYMEL 323, 325, AND 327 Wash Tank 105-14		
EU-R01-5	CYMEL 1161 AND 1168 Wash Tank 105-16		
EU-R01-6	CYMEL 1130 AND 1133 Wash Tank 105-18		
EU-R01-7	RCVD Methanol Tank 11		
EU-R01-8	CYMEL 303 (4% Salt) Storage Tank 111-001		
EU-R01-9	CYMEL 1168 Storage Tank 111-004		



## Section II: Emissions Units Information

TABLE II.A.1: EMISSION UNIT DESCRIPTION			
Emission Units	Emission Unit Description	Control Unit Description	Permit (P), Order (O), or Registration (R) Number*
EU-R01-10	RCVD Methanol Tank 12		
EU-R01-11	RCVD Methanol Tank 20 (Y66)		
EU-R01-12	Recovered Methanol Product Tank 203-2		
EU-R01-13	Distillate Tank 203-3A (Y37)		
EU-R01-14	8% n-Butanol Wash Tank 203-3B		
EU-R01-15	80% Iso-Butanol Surge Tank 203-4B	WS400, wet scrubber	
EU-R01-16	T-502 Methyl Formcel Storage	WS5023, wet scrubber	
EU-R01-17	T-503 Formalin Storage	WS5023, wet scrubber	
EU-R01-18	T-507 #2 Fuel Oil Tank		
EU-R01-19	Methanol Raw Material Tank 511	WS51112, wet scrubber	<del>P-189-0100</del> revoked
EU-R01-20	Methanol/Rec Methanol Raw Material Tank 512	WS51112, wet scrubber	<del>P-189-0100</del> revoked
EU-R01-21	Rcvd Waste Alcohol Tank 519		
EU-R01-22	Recovered Butyl Formcel Storage Tank 533	WS533, wet scrubber	
EU-R01-23	CYMEL 1168 Distillate Tank 534 (Y45)		
EU-R01-24	CYMEL 1133 Distillate (n-BuOH/MeOH) Tank 551	WS55153, wet scrubber	<del>P-189-0099</del> revoked
EU-R01-25	CYMEL Recovered n-Butanol Tank 553	WS55153, wet scrubber	
EU-R01-26	CYMEL 1168 Distillate Tank 556 (Y45)		
EU-R01-27	Storage Tank 563 (C385)		
EU-R01-28	CYMEL 1133 Storage Tank 565		
EU-R01-29	Product Storage Tank PR631 (PAREZ 631NC)		
EU-R01-30	Melamine Silo 1	BA372, fabric filter	R-189-0192 R-189-0193
EU-R01-31	Melamine Silo 2	BA373, fabric filter	R-189-0199 R-189-0200
EU-R01-32	Urea Silo	BA374, fabric filter	R-189-0194 R-189-0195
EU-R01-33	Tank 101-1 - HCl		
EU-R01-34	Tank 101-11: Caustic Soda		
EU-R01-35	Tank 101-12: Nitric Acid		
EU-R01-36	Tank 101-15: Empty		
EU-R01-37	Tank 101-24 Product PP-2601		
EU-R01-38	Tank 101-26: Empty		
EU-R01-39	Tank 101-37: Aerotex M-3		
EU-R01-40	Tank 104-36: Aerotex M-3		
EU-R01-41	Tank 104-41: Soda Ash		
EU-R01-42	Tank 10 - IPA		
EU-R01-43	Tank 130-001: Ethylene Glycol		
EU-R01-44	Tank 130-007: Propylene Glycol		
EU-R01-45	Tank 203-4A: Butanol (8%)		
EU-R01-46	Tank 506: Denatured Alcohol		
EU-R01-47	Tank 532: Solvesso		
EU-R01-48	Tank 535: Rec. Iso.But.		
EU-R01-49	Tank 539: Heat Transfer Fluid		
EU-R01-50	Tank 552: 100% n-Butanol		
EU-R01-51	Tank 555-12: n-Butanol Wash	WS555, wet scrubber	
EU-R01-52	Tank 555-4: Methanol Wash	WS555, wet scrubber	
EU-R01-53	Tank 555-6: Methanol Wash	WS555, wet scrubber	
EU-R01-54	Tank 555-8: Isobutanol Wash	WS555, wet scrubber	
EU-R01-55	Tank 555-10: n-BuOH Wash	WS555, wet scrubber	
EU-R01-56	Tank 557: 100% Isobutanol		
EU-R01-57	Tank 558: Xylene		
EU-R01-58	Tank 561: Cymel 1133	WS561, wet scrubber	<del>P-189-0155</del> revoked
EU-R01-59	Tank 562: 80% n-Butanol	WS56264, wet scrubber	
EU-R01-60	Tank 564: FERB	WS56264, wet scrubber	
EU-R01-61	Tank 566: 8% Butanol		
EU-R02-1	B-06/TR63/64 Spray dryer furnace		R-189-0173

## Section II: Emissions Units Information

TABLE II.A.1: EMISSION UNIT DESCRIPTION			
Emission Units	Emission Unit Description	Control Unit Description	Permit (P), Order (O), or Registration (R) Number*
EU-R02-2	B-13B 606 Hot oil furnace		
EU-R02-3	B-06 608 Hot oil furnace #2		<del>P-189-0009</del> revoked
EU-R03-1	B-05/TR1012 Product drums		
EU-R03-2	B-05/TR.101 Filter press (101-13A)		
EU-R03-3	B-05/TR.101 Filter press (101-13B)		
EU-R03-4	B-05/TR.102 Filter press (102-06)		
EU-R03-5	B-05/TR.102 Filter press (102-11)		
EU-R03-6	B-05/TR.102 Hot well (120-30)	05WS101-102-150, wet scrubber	
EU-R03-7	B-05/TR.101 Hot well (101-50)	05WS101-102-150, wet scrubber	
EU-R03-8	B-05/TR101 Reactor (101-01)	05CN10126, condenser	R-189-0150
EU-R03-9	B-05/TR.102 Reactor (102-01)	05CN10202, condenser	<del>P-189-0012</del> revoked
EU-R03-10	B-05/TR.101 Blend tank (101-11A)	05WSBT, wet scrubber	R-189-0150
EU-R03-11	B-05/TR.101 Blend tank (101-11B)	05WSBT, wet scrubber	R-189-0150
EU-R03-12	B-05/TR.101 Decanter (101-04)	05CN10126A, condenser	
EU-R03-13	B-05/TR.102 Decanter (102-41)	05CN12023, condenser	
EU-R03-14	B-05/TR.102 Cutting kettle (102-04)	05WSBT, wet scrubber	
EU-R03-15	B-05/TR.102 Wash surge tank (102-15A)		R-189-0150
EU-R03-16	B-05/TR.102 Wash surge tank (102-15B)		R-189-0150
EU-R03-17	B-05/TR.101 Receiver (101-05)	05CN10126A, condenser	R-189-0150
EU-R03-18	B-05/TR.102 Receiver (102-27)	05CN12023, condenser	
EU-R04-1	B-06/TR.65/68 Luwa Evaporator	06CN10460, condenser	
EU-R04-2	B-06/TR.65/68 Sparkler Filter		
EU-R04-3	B-06/TR.65/68 Flaker		
EU-R04-4	B-06/TR.65/68 Filter Press		
EU-R04-5	B-06/TR.65/68 Granulator		
EU-R04-6	B-06/TR.65/68 Kettle 65	06CN65, condenser	R-189-0182
EU-R04-7	B-06/TR.65/68 Kettle 68	06WSKK68, wet scrubber	R-189-0182
EU-R04-8	B-06/TR.65/68 Hold Tank 67		R-189-0182
EU-R04-9	B-06/TR.65/68 Hold Tank 68		R-189-0182
EU-R04-10	B-06/TR.65/68 Hold Tank 71	06WSIT71, wet scrubber	R-189-0182
EU-R04-11	B-06/TR.65/68 Hold Tank 72		R-189-0182
EU-R04-12	B-06/TR.65/68 Hold Tank 73		R-189-0182
EU-R04-13	B-06/TR.65/68 Receiver 65		R-189-0182
EU-R04-14	B-06/TR.65/68 Receiver 68 (aka Tank 101-31)		R-189-0182
EU-R04-15	B-06/TR.65/68 Hot Well		R-189-0182
EU-R04-16	B-06/TR.65/68 Drumming		
EU-R04-17	B-06 TRAIN 65/68 Product/Distillate Drumming		
EU-R04-18	B-06/TR.65/68 Tank Wagon		
EU-R05-1	B-06 Bag Bailer		
EU-R05-2	B-06/TR103467 Buggy		
EU-R05-3	B-06/TR.103/4 Centrifuge	06WS6BCENT, wet scrubber	
EU-R05-4	B-06/TR.106/7 Centrifuge	06WS6BCENT, wet scrubber	
EU-R05-5	B-06/TR.106/7 Bird Centrifuge		
EU-R05-6	B-06/TR103 & 104 Drumming		
EU-R05-7	B-06/TR106 & 107 Drumming		
EU-R05-8	B-06/TR.103 Filter Press (A)		
EU-R05-9	B-06/TR.103 Filter Press (B)		
EU-R05-10	B-06/TR.104 Filter Press (C)		
EU-R05-11	B-06/TR.104 Filter Press (D)		
EU-R05-12	B-06/TR.106 Filter Press (E)		
EU-R05-13	B-06/TR.106 Filter Press (F)		

## Section II: Emissions Units Information

TABLE II.A.1: EMISSION UNIT DESCRIPTION			
Emission Units	Emission Unit Description	Control Unit Description	Permit (P), Order (O), or Registration (R) Number*
EU-R05-14	B-06/TR.107 Filter Press (G)		
EU-R05-15	B-06/TR.107 Filter Press (H)		
EU-R05-16	B-06/TR.103 Reactor (103-01)	06CN10302A, condenser	R-189-0201
EU-R05-17	B-06/TR.104 Reactor (104-01)	06CN10402A, condenser	R-189-0201
EU-R05-18	B-06/TR.106 Reactor (106-01)	06CN10602A, condenser	<del>P-189-0026</del> revoked
EU-R05-19	B-06/TR.107 Reactor (107-01)	06CN10702A, condenser	<del>P-189-0027</del> revoked
EU-R05-20	B-06/TR.103 Blend Tank (103-08)		R-189-0201
EU-R05-21	B-06/TR.103 Blend Tank (103-11)		R-189-0201
EU-R05-22	B-06/TR.104 Blend Tank (104-08)	06CN10408, condenser	R-189-0201
EU-R05-23	B-06/TR.104 Blend Tank (104-11)		R-189-0201
EU-R05-24	B-06/TR.106 Blend Tank (106-08)		<del>P-189-0030</del> revoked
EU-R05-25	B-06/TR.106 Blend Tank (106-11)		<del>P-189-0032</del> revoked
EU-R05-26	B-06/TR.107 Blend Tank (107-08)		<del>P-189-0034</del> revoked
EU-R05-27	B-06/TR.107 Blend Tank (107-11)		<del>P-189-0033</del> revoked
EU-R05-28	B-06/TR.107 Blend Tank (107-24)		
EU-R05-29	B-06/TR.103 Hydrochloric Acid Weigh Tank		
EU-R05-30	B-06/TR.103 Nitric Acid Weigh Tank		
EU-R05-31	B-06/TR.103/4/6/7 Solvent Transfer Tank 3	06WS10341, wet scrubber	
EU-R05-32	B-06/TR.103 33% Caustic Weigh Tank		
EU-R05-33	B-06/TR.104 Acidified Methanol Tank		
EU-R05-34	B-06/TR.104 IMPA Weigh Tank		
EU-R05-35	B-06/TR.106 Nitric Acid Weigh Tank		
EU-R05-36	B-06/TR.106 Caustic Head Tank		
EU-R05-37	B-06/TR.107 Nitric Acid Weigh Tank		
EU-R05-38	B-06/TR.107 Caustic Head Tank		
EU-R05-39	B-06/TR.106/7 Aging Tank #74		R-189-0182
EU-R05-40	B-06/TR.103/4 Aging Tank #75		R-189-0182
EU-R05-41	B-06/TR.103 Receiver (103-05)		R-189-0201
EU-R05-42	B-06/TR.104 Receiver (104-05)		R-189-0201
EU-R05-43	B-06/TR.106 Receiver 106-05		
EU-R05-44	B-06/TR.107 Receiver (107-05)		
EU-R05-45	B-06/TR.103/104 Hot Well (103-14)	06WS10314, wet scrubber	
EU-R05-46	B-06/TR.106/107 Hot Well (106-14)	06WS10614, wet scrubber	
EU-R05-47	B-06/TR.103467 Tank Wagon Loading		
EU-R06-1	B-06/TR.104-34 Reactor (104-34)	06VS10434, venturi scrubber	
EU-R06-2	B-06/TR.104-34 Tank Wagon Loading		
EU-R07-1	B-05/TR.120 Filter Press		
EU-R07-2	B-05/TR.120 Hot Well (102-28)		
EU-R07-3	B-05/TR.120 Reactor (120-3)	05WS1203, wet scrubber	R-189-0150
EU-R07-4	B-05/TR.120 Blend Tank (120-13)	05WSBT, wet scrubber	R-189-0150
EU-R07-5	B-05/TR.120 Cutting Kettle (120-07)	05WSBT, wet scrubber	R-189-0156
EU-R07-6	B-05/TR.120 Drums		
EU-R07-7	Adipic Acid Hopper		<del>P-189-0006</del> revoked
EU-R08-1	B-05/TR.150 Acrylamide Bag Charging	05VS150A, venturi scrubber	
EU-R08-2	B-05/TR.150 Filter Press		
EU-R08-3	B-05/TR.150 Reactor (150-01)	05CN15004, condenser	<del>P-189-0007</del> revoked
EU-R08-4	B-05/TR.150 Rolling Storage Tank Wagon Loading		
EU-R08-5	B-05/TR.150 Blend Tank (150-02)	05WSBT, wet scrubber	<del>P-189-0008</del> revoked
EU-R08-6	B-05/TR.150 Decanter/Receiver (150-18)		
EU-R08-7	B-05/TR.150 Receiver/8% (150-34)		
EU-R08-8	B-05/TR.150 Hot Well (150-23)	05WS101-102-150, wet scrubber	

## Section II: Emissions Units Information

TABLE II.A.1: EMISSION UNIT DESCRIPTION			
Emission Units	Emission Unit Description	Control Unit Description	Permit (P), Order (O), or Registration (R) Number*
EU-R08-9	B-05/TR.150 Drums		
EU-R08-10	B-05/TR.150 Tank Wagon Loading		
EU-R09-1	B-06/TR.66 Filter Press		
EU-R09-2	B-06/TR.66 Reactor Kettle 66		
EU-R09-3	B-06/TR.66 Holding Tank 76		R-189-0182
EU-R09-4	B-06/TR.66 Holding Tank 77		R-189-0182
EU-R09-5	B-06/TR.66 Drumming		
EU-R09-6	B-06/TR.66 Tank Wagon Loading		
EU-R10-1	B-06/TR.114-8 Reactor (114-01)	06CN11428, condenser	
EU-R10-2	B-06/TR.114-8 Reactor (114-08)	06WS63003, wet scrubber	
EU-R10-3	B-06/TR.114-8 12.5% Caustic Tank		
EU-R10-4	B-06/TR.114-8 NH4 Persulfate Tank (114-20)		
EU-R10-5	B-06/TR.114-8 Soda Ash Tank (114-23)		
EU-R10-6	B-06/TR.114-8 15% Sulfuric Acid Tank		
EU-R10-7	B-06/TR.114-8 Sodium Metabisulfite Tank (114-29)		
EU-R10-8	B-06/TR.114-8 Tank Wagon Loading		
EU-R11-1	B-06 MFRS Methanol Column	06CP10140, condenser	<del>P-189-0018</del> revoked
EU-R11-2	B-06 MFRS Formaldehyde Column 110-03		
EU-R11-3	B-06 MFRS Methanol Column Receiver (Tank 101-31 East)		
EU-R11-4	B-06 MFRS Formaldehyde Column Receiver 110-20	06WS11020, wet scrubber	
EU-R11-5	B-06 MFRS Formaldehyde Column Receiver 110-20		
EU-R12-1	B-05 MARS Methanol Stripper Column C-1	05CPE4, condenser	
EU-R12-2	B-05 MARS Water Stripper Column C-2	05CPE5, condenser	
EU-R12-3	B-05 MARS Butanol Column C-4	05CPE19, condenser	
EU-R12-4	B-05 MARS Decanter D-1		
EU-R12-5	B-05 MARS Decanter D-3		
EU-R12-6	B-05 Methanol Reflux Receiver Tank 3	05CPE4, condenser	
EU-R12-7	B-05 MARS Feed Tank 4 (MeOH Column)		
EU-R12-8	B-05 MARS Feed Tank 5 (Water Stripper Column)		
EU-R12-9	B-05 MARS Feed Tank 7 (Butanol Column)		
EU-R13-1	B-06 Vacuum Belt Filter		
EU-R13-2	B-06 Kettles 61/62 Filter Press		
EU-R13-3	B-06 Reactor 61	06CN061, condenser	R-189-0182
EU-R13-4	B-06 Kettle 62		R-189-0182
EU-R13-5	B-06 Train 61/62 Product Drumming		
EU-R13-6	B-06/TR.61/62 Tank Wagon Loading		
EU-R14-1	B-06/TR.63/64 Spray Dryer	06WS63, wet scrubber	R-189-0173
EU-R14-2	B-06/TR.63/64 Cyclones	06WS63, wet scrubber	R-189-0173
EU-R14-3	B-06/TR.63/64 Kettle 63	06CN63, condenser	R-189-0173
EU-R14-4	B-06/TR.63/64 Kettle 64	06CN64, condenser	R-189-0173
EU-R14-5	B-06/TR.63/64 Feed Tank 63		R-189-0173
EU-R14-6	B-06/TR.63/64 Feed Tank 64		R-189-0173
EU-R14-7	Spray Dryer Rework Room	06WS-REWORK, wet scrubber	
EU-R14-8	Spray Dryer Sifter	06WS-REWORK, wet scrubber	
EU-R14-9	Spray Dryer Product Bagging	06WS-REWORK, wet scrubber	
EU-R14-10	Equipment Leak Fugitives		
EU-R15-1	Equipment Leak Fugitives		
EU-R16-1	B-06 Resins Cooling Towers		
EU-R16-2	B-05 Resins Cooling Towers		
EU-R17-1	Building 5 Parts Cleaner		

## Section II: Emissions Units Information

TABLE II.A.1: EMISSION UNIT DESCRIPTION			
Emission Units	Emission Unit Description	Control Unit Description	Permit (P), Order (O), or Registration (R) Number*
EU-R17-2	Building 6 Parts Cleaner		
EU-S01-1	Tank 100-76: Diesel		
EU-S01-2	Tank 120-006: Phosphoric Acid		
EU-S01-3	Tank 130-004: PAM Line Washer		
EU-S01-4	Tank 130-010: Sodium Phosphate		
EU-S01-5	Tank 16: #6 fuel		
EU-S01-6	Tank 170-008: #2 fuel		
EU-S01-7	Tank 1820A: Magnifloc 1820A		
EU-S01-8	Tank 18: #6 Fuel Oil		
EU-S01-9	Tank 170-008(L12-R1): No.2 Fuel Oil		
EU-S01-10	Tank 559: Gasoline		
EU-S01-11	Tank 560: Diesel Fuel (vehicles)		
EU-S01-12	Tank 581C: Magnifloc 581C		
EU-S01-13	Tank 605-002: Brine		
EU-S01-14	Lime Silo		P-189-0004 (revoked)
EU-S02-1	B-01 EM Generator Gasoline		
EU-S02-2	B-04 Generator Propane Vent		
EU-S02-3	B-05B Generator Gasoline Vent		
EU-S02-4	B-06 Generator Gasoline Vent		
EU-S02-5	B-10 Emergency Generator Diesel Vent		P-189-0082
EU-S02-6	B-15 Generator Propane Vent		
EU-S02-7	B-22 EM Generator Propane Vent		
EU-S02-8	B-27 Generator Gasoline Vent		
EU-S02-9	WWTP EM Generator Kerosene		P-189-0075
EU-S02-10	#4 Well Generator Diesel Vent	Catalytic Converter	
EU-S02-11	B-02 Generator Diesel Vent		
EU-S02-12	B23 Emergency Water Pump - diesel		
EU-S02-13	Diesel Air Compressor Engine		P-189-0189
EU-S03-1	B-99 Boiler #1		R-189-0108
EU-S03-2	B-99 Boiler #3		R-189-0110
EU-S03-3	B-99 Boiler #4		R-189-0109
EU-S04-1	Wastewater Treatment Plant		
EU-S05-1	<del>B-99 WWTP Sludge Incinerator Vent</del> <b>Decommissioned</b>	99WS01, wet scrubber	P-189-0010 (revoked)
EU-S06-1	B-99 Services Landfill		
EU-S07-1	CYRO Soil Vapor Extraction	Biofilter	
EU-S08-1	Building 2 Parts Cleaner		
EU-S08-2	Building 15 Parts Cleaner		
EU-S09-1	Equipment Leak Fugitives		
Grouped Emission Units			
GEU-01	EU-C01-1 through -14, tanks EU-S01-1, -3, -5 through -12, tanks EU-R01-1 through -29, -36 through -40, and -42 through -61 tanks	As above	As above
GEU-02	EU-S02-1 through -4, -6 through -8, -10 through -12, engines	As above	As above
GEU-03	EU-S03-1 through -3, boilers EU-R02-1 and -3, Resins combustion sources	As above	As above
GEU-04	EU-R17-1, EU-R17-2, EU-S08-1, EU-S08-2, Parts Cleaners	As above	As above
GEU-05	EU-R14-1 through -10	As above	As above
GEU-06	EU-C01-1, EU-C03-1 through EU-C09-1, EU-C11-1, EU-R01-*, EU-R03-1 through EU-R13-6, EU-R15-1 through EU-R16-2, EU-S04-1	As above	As above

## Section II: Emissions Units Information

\* It is not intended to incorporate by reference these NSR Permits, Orders, or Registrations into this Title V permit.

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

TABLE II.A.2: EMISSIONS UNIT IDENTIFICATION, SOS		
Identification of Operating Scenarios	Emissions Unit(s) Associated with the Scenarios	Description of Scenarios
SOS-1	All units included in this standard operating scenario	Plastics and resins manufacturing

### Section III: Applicable Requirements and Compliance Demonstration

The following tables contain terms and conditions for the operation of each identified Emission Unit and Operating Scenario regulated by this permit.

#### A. GEU-01, TANKS

Table III.A.: GEU-01				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	VOC emissions for EU-C01-4,5,6 EU-R01-19,20,24,58	≤ 500 ppm above background ≥ 95% control efficiency	40 CFR 60 Subpart Kb	A.1.
	VOC	See below	§22a-174-20(a)	A.2.

#### 40 CFR 60 Subpart Kb Requirements

A.1. The Permittee shall demonstrate compliance with the limitations in Table III.A. based on, but not limited to, the following requirements.

##### A.1.a. *Monitoring and Testing Requirements*

- The Permittee shall maintain a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by a reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60 Subpart VV, §60.485(b). [40 CFR §60.112b(a)(3)(i)]
- The control device shall be designed and operated to reduce inlet VOC emissions by 95% or greater. [40 CFR §60.112b(a)(3)(ii)]
- The Permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with 40 CFR 60.114b(c)(1) [40 CFR §60.114b(c)(2)].

##### A.1.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- A copy of the operating plan. [40 CFR §60.115b(c)(1)]
- The measured values of parameters in Section III.A.1.a.iii. [40 CFR §60.115b(c)(2)]
- The Permittee shall keep readily accessible records showing the dimension of each tank and an analysis showing the capacity of each tank for the life of each tank. [40 CFR 60.116b(b)]

##### A.1.c. *Reporting Requirements*

- Provide the records specified in Section III.A.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### Section III: Applicable Requirements and Compliance Demonstration

#### §22a-174-20(a) Requirements

A.2. The Permittee shall comply with the requirements of §22a-174-20(a).

- A.2.a. The Permittee shall not place, store or hold in any stationary tank, reservoir or other container of more than 40,000 gallons (150,000 liters) capacity any volatile organic compound with a vapor pressure of 1.5 psia 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 time to prevent vapor or gas loss to the atmosphere or is designed, and equipped, with one of the vapor loss control devices listed below. If the control devices specified are used to comply with the requirements of §22a-174-20(a)(2), then the requirements of §22a-174-20(a)(8) must be met.
- i. A fixed roof and a floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment is not permitted if the volatile organic compound has a vapor pressure of 11.0 psia (568 mm Hg), or greater under actual storage conditions. All tank gauging or sampling devices must be gas-tight except when tank gauging or sampling is taking place. [§22a-174-20(a)(2)(A)]
  - ii. A vapor recovery system which collects all volatile organic compound vapors and gases discharged from the tank and a vapor return or disposal system which is designed to process such vapors so as to reduce their emission to the atmosphere by at least 95% by weight. [§22a-174-20(a)(2)(B)]
  - iii. Other equipment or means with an efficiency equal to that required under §22a-174-20(a)(2)(B) for purposes of air pollution control as may be approved by the commissioner by permit or order. [§22a-174-20(a)(2)(C)]
  - iv. On or after June 1, 1985 a floating roof, consisting of a pontoon type, double deck type roof or external floating roof cover, which will rest on the surface of the liquid contents and be equipped with primary and secondary closure seals to close the space between the roof edge and the tank wall. This control equipment is not permitted if the volatile organic compound has a vapor pressure of 11.0 psia (568 mm Hg) or greater under actual storage conditions. All tank gauging or sampling devices must be gas-tight except when tank gauging or sampling is taking place. The owner or operator of any tank subject to this provision shall ensure that: [§22a-174-20(a)(2)(D)]
    - A. Any seal is intact and uniformly in place around the circumference of the floating roof and the tank wall.
    - B. The total area of gaps, determined in accordance with the requirements of §22a-174-20(a)(9), exceeding 0.125 inches in width between the secondary closure seal and the tank wall does not exceed 1.0 in<sup>2</sup> per foot of tank diameter.
    - C. A secondary closure seal gap measurement as specified above is made annually.
    - D. A visual inspection of the secondary closure seal is conducted semiannually.
    - E. Any emergency roof drain is provided with a slotted fabric cover, which covers at least 90% of the open area.
- A.2.b. The Permittee shall not place, store or hold in any stationary storage vessel of more than 250 gallon (950 liter) capacity any volatile organic compound with a vapor pressure of 1.5 psi or greater under actual storage conditions unless such vessel is equipped with a permanent submerged fill pipe with a discharge point eighteen (18) inches or less from the bottom of the storage vessel or is a pressure tank as described in §22a-174-20(a)(2). [§22a-174-20(a)(3)]
- A.2.c. The provisions of §22a-174-20(a)(3) shall not apply to loading of volatile organic compounds into any storage vessel having a capacity of less than one-thousand (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. [§22a-174-20(a)(4)]
- A.2.d. If the Permittee uses the control devices specified in §22a-174-20(a)(2)(A) or (D), the Permittee shall ensure that such tank meets the requirements below: [§22a-174-20(a)(8)]



### Section III: Applicable Requirements and Compliance Demonstration

- i. There are no visible holes, tears or other openings in the seal or any seal fabric or materials
- ii. All openings except stub drains are equipped with covers, lids or seals such that:
  - A. The cover, lid or seal is in the closed position at all times except in actual use.
  - B. Automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports.
  - C. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
- iii. Routine inspections are conducted through roof hatches once per month.
- iv. A complete inspection of cover and seal is conducted whenever the tank is emptied for non-operational reasons but in any event at least once per year.

#### A.2.e. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Records of the average monthly storage temperature, true vapor pressure, monthly throughput and type of volatile organic compounds stored are maintained. [§22a-174-20(a)(8)(E) and §22a-174-33]
- ii. Records of the results of inspections conducted under §22a-174-20(a)(8)(C) and (D) are maintained. [§22a-174-20(a)(8)(F) and §22a-174-33]

#### A.2.f. *Reporting Requirements*

- i. Provide the records specified in Section III.A.2.e. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### B. GEU-02, ENGINES W/O PERMITS

Table III.B.: GEU 2				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions for Each Unit	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	<b>NO<sub>x</sub> RACT requirements</b>	See below	§22a-174-22	B.1.
	<b>Fuel sulfur content</b>	≤ 0.3 wt%, #2 oil	CGS 16a-21a §22a-174-19(a)(2)(i)	B.2.

- B.1. If the Permittee operates the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to unhealthy,” “unhealthy,” or “very unhealthy,” then RCSA §22a-174-22 subsections (d) through (k) shall apply to the engine, unless exempted by the commissioner.

#### B.1.a. *Monitoring Requirements*

- i. The Permittee shall monitor daily emergency engine operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]

### Section III: Applicable Requirements and Compliance Demonstration

#### B.1.b. *Record Keeping Requirements*

- i. The Permittee shall keep daily records of operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]
- ii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance. [RCSA § 22a-174-22(l)(1)(D)]

#### B.1.c. *Reporting Requirements*

- i. The Permittee shall provide the records specified in Section III.B.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- ii. On or before April 15 of each year, the Permittee shall submit a report on NOx emissions on a form provided by the commissioner. [RCSA § 22a-174-22(l)(6)]

B.2. The Permittee shall demonstrate compliance with the fuel sulfur limitations in Table III.B. based on, but not limited to, the following requirements.

#### B.2.a. *Monitoring and Testing Requirements*

- i. Verify fuel sulfur content for each shipment. [RCSA §22a-174-19(a)(5)]
- ii. Fuel analysis for the sulfur content of liquid fuels shall be done according to the most current ASTM Methods D 129 or D 1552. [RCSA §22a-174-5(b)(1)]

#### B.2.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Fuel merchant certification of the sulfur content for each fuel shipment. [RCSA §22a-174-19(a)(5)]

#### B.2.c. *Reporting Requirements*

- i. Provide the records specified in Section III.B.2.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### C. EU-S02-5, ONAN MODEL 275DFBF EMERGENCY GENERATOR

Table III.C.: EU-S02-5, Onan Model 275DFBF Emergency Generator				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions for Each Unit	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	PM-10	Emission factor: 0.479 lb/h Annual emissions: ≤ 0.12 tpy	P-189-0082	C.1.
	SO <sub>x</sub>	Emission factor: 0.595 lb/h Annual emissions: ≤ 0.15 tpy	P-189-0082	
	NO <sub>x</sub>	Emission factor: 11.508 lb/h Annual emissions: ≤ 2.9 tpy	P-189-0082	
	VOC	Emission factor: 0.24 lb/h Annual emissions: ≤ 0.06 tpy	P-189-0082	
	CO	Emission factor: 0.738 lb/h Annual emissions: ≤ 0.19 tpy	P-189-0082	
	Annual fuel usage	≤ 10,800 gal	P-189-0082	

### Section III: Applicable Requirements and Compliance Demonstration

Table III.C.: EU-S02-5, Onan Model 275DFBF Emergency Generator				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions for Each Unit	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number
	Annual hours of operation	≤ 500 hr	P-189-0082	
	Fuel sulfur content	≤ 0.3 wt. %	CGS §16a-21a	C.2.
	NO <sub>x</sub> RACT requirements	See below	§22a-174-22	C.3.

C.1. Emissions of PM<sub>10</sub>, SO<sub>x</sub>, NO<sub>x</sub>, VOC and CO shall not exceed the limitations stated in Table III.C. The Permittee shall demonstrate compliance with such limitations based on, but not limited to, the following requirements:

C.1.a. *Monitoring and Testing Requirements*

- i. Verify emissions using monthly fuel monitoring, hours of operation, emission factors and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual emissions shall be verified by adding the current month's emissions to the previous eleven months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]

C.1.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Records of monthly and annual fuel usage and emissions shall be kept. [RCSA §22a-174-33(o)(2)]
- ii. Records of hours of operation shall be kept. [RCSA §22a-174-33(o)(2)]

C.1.c. *Reporting Requirements*

- i. On a monthly basis, review data recorded and calculated for that month and report to the commissioner within two (2) working days any exceedences of an emission limit. [Section VII.I.]
- ii. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.E.
- iii. Provide the records specified in Section III.C.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

C.2. The Permittee shall demonstrate compliance with the fuel sulfur limitations in Table III.C. based on, but not limited to, the following requirements.

C.2.a. *Monitoring and Testing Requirements*

- i. Verify fuel sulfur content for each shipment. [RCSA §22a-174-19(a)(5)]
- ii. Fuel analysis for the sulfur content of liquid fuels shall be done according to the most current ASTM Methods D 129 or D 1552. [RCSA §22a-174-5(b)(1)]

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

#### **C.2.b. *Record Keeping Requirements***

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Fuel merchant certification of the sulfur content for each fuel shipment. [RCSA §22a-174-19(a)(5)]

#### **C.2.c. *Reporting Requirements***

- i. Provide the records specified in Section III.C.2.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

- C.3. If the Permittee operates the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to unhealthful,” “unhealthful,” or “very unhealthful,” then RCSA §22a-174-22 subsections (d) through (k) shall apply to the engine, unless exempted by the Commissioner.

#### **C.3.a. *Monitoring Requirements***

- i. The Permittee shall monitor daily emergency engine operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]

#### **C.3.b. *Record Keeping Requirements***

- i. The Permittee shall keep daily records of operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]
- ii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance. [RCSA § 22a-174-22(l)(1)(D)]

#### **C.3.c. *Reporting Requirements***

- i. The Permittee shall provide the records specified in Section III.C.3.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- ii. On or before April 15 of each year, the Permittee shall submit a report on NO<sub>x</sub> emissions on a form provided by the commissioner. [RCSA § 22a-174-22(l)(6)]

### Section III: Applicable Requirements and Compliance Demonstration

#### D. EU-S02-9, KOHLER EMERGENCY GENERATOR, MODEL # 9163-7416

Table III.D.: EU-S02-9, Kohler Emergency Generator, Model # 9163-7416				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions for Each Unit	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	PM-10	Emission factor: 1.2 lb/h Annual emissions: $\leq 0.36$ tpy	P-189-0075	D.1.
	SO <sub>x</sub>	Emission factor: 1.41 lb/h Annual emissions: $\leq 0.42$ tpy	P-189-0075	
	NO <sub>x</sub>	Emission factor: 49.5 lb/h Annual emissions: $\leq 14.9$ tpy	P-189-0075	
	VOC	Emission factor: 3.38 lb/h Annual emissions: $\leq 1.0$ tpy	P-189-0075	
	CO	Emission factor: 10.9 lb/h Annual emissions: $\leq 3.2$ tpy	P-189-0075	
	Annual fuel usage	$\leq 63,000$ gal	P-189-0075	
	Annual hours of operation	$\leq 600$ hr	P-189-0075	
	Fuel sulfur content	$\leq 0.1$ wt. %	P-189-0075	D.2.
	NO <sub>x</sub> RACT requirements	See below	§22a-174-22	D.3.

D.1. Emissions of PM<sub>10</sub>, SO<sub>x</sub>, NO<sub>x</sub>, VOC and CO shall not exceed the limitations stated in Table III.D. The Permittee shall demonstrate compliance with such limitations based on, but not limited to, the following requirements:

##### D.1.a. *Monitoring and Testing Requirements*

- i. Verify emissions using monthly fuel monitoring, hours of operation, emission factors and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual emissions shall be verified by adding the current month's emissions to the previous eleven months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]

##### D.1.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Records of monthly and annual fuel usage and emissions shall be kept. [RCSA §22a-174-33(o)(2)]
- ii. Records of hours of operation shall be kept. [RCSA §22a-174-33(o)(2)]

##### D.1.c. *Reporting Requirements*

- i. On a monthly basis, review data recorded and calculated for that month and report to the commissioner within two (2) working days any exceedences of an emission limit. [Section VII.I.]
- ii. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.E.
- iii. Provide the records specified in Section III.D.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

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

- D.2. The Permittee shall demonstrate compliance with the fuel sulfur limitations in Table III.D. based on, but not limited to, the following requirements.

*D.2.a. Monitoring and Testing Requirements*

- i. Verify fuel sulfur content for each shipment. [RCSA §22a-174-19(a)(5)]
- ii. Fuel analysis for the sulfur content of liquid fuels shall be done according to the most current ASTM Methods D 129 or D 1552. [RCSA §22a-174-5(b)(1)]

*D.2.b. Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Fuel merchant certification of the sulfur content for each fuel shipment. [RCSA §22a-174-19(a)(5)]

*D.2.c. Reporting Requirements*

- i. Provide the records specified in Section III.D.2.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

- D.3. If the Permittee operates the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to unhealthful,” “unhealthful,” or “very unhealthful,” then RCSA §22a-174-22 subsections (d) through (k) shall apply to the engine, unless exempted by the Commissioner.

*D.3.a. Monitoring Requirements*

- i. The Permittee shall monitor daily emergency engine operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]

*D.3.b. Record Keeping Requirements*

- i. The Permittee shall keep daily records of operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]
- ii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance. [RCSA § 22a-174-22(l)(1)(D)]

*D.3.c. Reporting Requirements*

- i. The Permittee shall provide the records specified in Section III.D.3.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- ii. On or before April 15 of each year, the Permittee shall submit a report on NO<sub>x</sub> emissions on a form provided by the commissioner. [RCSA § 22a-174-22(l)(6)]

### Section III: Applicable Requirements and Compliance Demonstration

#### E. EU-S02-13, CATERPILLAR MODEL 3406C DIESEL COMPRESSOR

Table III.E.: EU-S02-13, Caterpillar Model 3406C Diesel Compressor				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions for Each Unit	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	PM-10	Emission factor: 0.6 lb/h Annual emissions: $\leq 0.04$ tpy	P-189-0189	E.1.
	SO <sub>x</sub>	Emission factor: 0.87 lb/h Annual emissions: $\leq 0.63$ tpy	P-189-0189	
	NO <sub>x</sub>	Emission factor: 5.6 lb/h Annual emissions: $\leq 4.03$ tpy	P-189-0189	
	VOC	Emission factor: 0.06 lb/h Annual emissions: $\leq 0.04$ tpy	P-189-0189	
	CO	Emission factor: 0.6 lb/h Annual emissions: $\leq 0.43$ tpy	P-189-0189	
	Annual fuel usage	$\leq 30,960$ gal	P-189-0189	
	Annual hours of operation	$\leq 1440$ hr	P-189-0189	
	Fuel sulfur content	$\leq 0.3$ wt. %	P-189-0189	E.2.
	NO <sub>x</sub> RACT requirements	See below	§22a-174-22	E.3.

E.1. Emissions of PM<sub>10</sub>, SO<sub>x</sub>, NO<sub>x</sub>, VOC and CO shall not exceed the limitations stated in Table III.E. The Permittee shall demonstrate compliance with such limitations based on, but not limited to, the following requirements:

E.1.a. *Monitoring and Testing Requirements*

- i. Verify emissions using monthly fuel monitoring, hours of operation, emission factors and engineering calculations. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. Annual emissions shall be verified by adding the current month's emissions to the previous eleven months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]

E.1.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Records of monthly and annual fuel usage and emissions shall be kept. [RCSA §22a-174-33(o)(2)]
- ii. Records of hours of operation shall be kept. [RCSA §22a-174-33(o)(2)]

E.1.c. *Reporting Requirements*

- i. On a monthly basis, review data recorded and calculated for that month and report to the commissioner within two (2) working days any exceedences of an emission limit. [Section VII.I.]
- ii. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.E.
- iii. Provide the records specified in Section III.E.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### Section III: Applicable Requirements and Compliance Demonstration

- E.2. The Permittee shall demonstrate compliance with the fuel sulfur limitations in Table III.E. based on, but not limited to, the following requirements.

E.2.a. *Monitoring and Testing Requirements*

- i. Verify fuel sulfur content for each shipment. [RCSA §22a-174-19(a)(5)]
- ii. Fuel analysis for the sulfur content of liquid fuels shall be done according to the most current ASTM Methods D 129 or D 1552. [RCSA §22a-174-5(b)(1)]

E.2.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Fuel merchant certification of the sulfur content for each fuel shipment. [RCSA §22a-174-19(a)(5)]

E.2.c. *Reporting Requirements*

- i. Provide the records specified in Section III.E.2.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

- E.3. If the Permittee operates the emergency engine for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that ozone levels will be “moderate to unhealthful,” “unhealthful,” or “very unhealthful,” then RCSA §22a-174-22 subsections (d) through (k) shall apply to the engine, unless exempted by the Commissioner.

E.3.a. *Monitoring Requirements*

- i. The Permittee shall monitor daily emergency engine operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]

E.3.b. *Record Keeping Requirements*

- i. The Permittee shall keep daily records of operating hours, identifying the operating hours of emergency and non-emergency use. [RCSA § 22a-174-22(l)(1)(A)]
- ii. The Permittee shall keep records of all tune-ups, repairs, replacement of parts and other maintenance. [RCSA § 22a-174-22(l)(1)(D)]

E.3.c. *Reporting Requirements*

- i. The Permittee shall provide the records specified in Section III.E.3.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- ii. On or before April 15 of each year, the Permittee shall submit a report on NO<sub>x</sub> emissions on a form provided by the commissioner. [RCSA § 22a-174-22(l)(6)]



### Section III: Applicable Requirements and Compliance Demonstration

#### F. GEU-03, BOILERS #1, #3, #4, RESINS SPRAY DRYER AND HOT OIL FURNACE #2

Table III.F.: GEU 3, Boilers #1, #3, #4, Resins Spray Dryer and Hot Oil Furnace #2				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions for Each Unit	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	NO <sub>x</sub> Trading Order requirements	See below	SO 8114A	F.1.
	Fuel sulfur content	#2 oil ≤ 0.3 wt% #6 oil ≤ 1 wt%	CGS 16a-21a §22a-174-19(a)(2)(i)	F.2.
	NO <sub>x</sub>	All emission units except EU-R02-1: Nat. gas: 0.20 #/MMBtu EU-S03-3, EU-R02-3: #2 oil: 0.20 #/MMBtu EU-S03-1 and -2: #6 oil: 0.25 #/MMBtu EU-R02-1: Nat gas: 0.254#/MMBtu, #2 oil: 0.186 #/MMBtu	§22a-174-22	F.3.

#### NO<sub>x</sub> Trading Order 8114A

F.1. The Permittee shall ensure compliance with NO<sub>x</sub> Trading Order No. 8114A based on, but not limited to, the following requirements [SO 8114A].

F.1.a. At the facility, the Permittee shall comply with RCSA §22a-174-22, through emission reduction trading until the Permittee achieves permanent compliance with the emissions standard in RCSA §22a-174-22(e) or by April 30, 2007 whichever is earlier:

- i. The Permittee shall use approved DERCS as required under SO 8114A;
- ii. The Permittee shall have in its possession sufficient approved DERCS to meet applicable NO<sub>x</sub> emission limits as allowed under SO 8114A; and
- iii. The Permittee shall comply during the operation of EU-S03-1 through -3 with the FLERs shown in Table III.F.1. (Table 1 of SO 8114A.)

Table III.F.1. (Table 1 from SO 8114A) NO <sub>x</sub> Emission rates, FLERs and allowable Rates in #/MMBtu							
EU	Fuel	Heat Input MMBtu/h	Emission Test 2/2000	FLER Credit or debit	NO <sub>x</sub> Allowable Limits	Stack Test Date	Next Test Due
Boiler 1 EU-S03-1 R-189-0108	#6 oil Nat. Gas	80 80	0.28 0.07	0.390 0.093	0.25 0.20	2.03.00	2.03.05
Boiler 3 EU-S03-2 R-189-0110	#6 oil Nat. Gas	89 89	0.26 0.20	0.30 n/a	0.25 0.20	2.04.00	2.04.05
Boiler 4 EU-S03-3 R-189-0109	#2 oil Nat. Gas	21 21	0.082 0.102	0.101 0.11	0.20 0.20	1.31.00	1.31.05
Sludge Incinerator EU-S05-1 P-189-0010 *	Sludge and #2 oil	11	0.29	0.52	0.33	2.09.00	2.09.05
Hot Oil Furn. EU-R02-3 P-189-0009	#2 oil Nat. Gas	11 11	0.12 0.10	0.155 0.11	0.20 0.20	2.09.00	2.09.05

### Section III: Applicable Requirements and Compliance Demonstration

Table III.F.1. (Table 1 from SO 8114A) NO <sub>x</sub> Emission rates, FLERs and allowable Rates in #/MMBtu							
EU	Fuel	Heat Input MMBtu/h	Emission Test 2/2000	FLER Credit or debit	NO <sub>x</sub> Allowable Limits	Stack Test Date	Next Test Due
Spray Dryer EU-R02-01 R-189-0173	#2 oil	10	0.14	0.173 (122.6 ppm)	0.254 (180 ppm)	2.09.00	2.09.05
	Nat. Gas	10	0.12	0.132 (128 ppm)	0.186 (180 ppm)		

\* - Decommissioned

#### F.1.b Averaging and DERC trading

Until April 30, 2007, before the first day of each month the Permittee shall have in its possession sufficient approved DERCs for such month for fuel-burning equipment specified in Table III.F.1. based on the following calculation:

No later than the last day of the following month, calculate DERCs used in the preceding calendar month as follows:

- i. Total Monthly Averaging Credits (MACs) available from those units that are below the allowable emissions limits (fuels other than #6 oil) in the Averaging Set (as defined in Table III.F.1.). The Total MACs shall be the sum of the MACs during that month calculated for each unit in the Averaging Set as follows:

$$\text{MACs (tons)} = [\text{heat input in MMBtu} \times ((0.80 \times \text{Allowable limits in \#/MMBtu}) - \text{Credit FLER in \#/MMBtu})] / 2000 \text{ \#/ton.}$$

Where: Allowable limit = allowable limit rate in #/MMBtu shown in Table III.F.1.

Full load emission rate credit of debit (FLER) = for the appropriate equipment as shown in Table III.F.1.

Discount (0.80) = includes 20% discount on allowable limits for averaging credits above, (and a 10% discount and a 5% design margin on debits below).

Fuel heating value = as appropriate for the fuel used.

- ii. Total Monthly Averaging Debits (MADs) generated from the sludge incinerator (EU-S05-1) and boiler 1 (EU-S03-1) and boiler 3 (EU-S03-2) units when burning #6 oil with emission rates in excess of allowable limits in the Averaging Set. The Total MADs shall be the sum of the MADs during that month calculated for each unit in the Averaging Set as follows:

$$\text{MADs (tons)} = [\text{heat input in MMBtu} \times ((0.85 \times \text{allowable limit in \#/MMBtu}) - \text{Debit FLER in \#/MMBtu})] / 2000 \text{ \#/ton.}$$

- iii. Net MADs for each calendar month as follows:

Net MADs = the sum of the Total MADs (negative number) + the Total MACs (positive number). No approved DERCs will be required for emissions in any month during which there are more MACs than MADs. Net MACs may not be carried forward to the next month.

### Section III: Applicable Requirements and Compliance Demonstration

- iv. For each month with a negative Net MADs, the amount of DERCs required for such month shall equal the net MADs. The total amount of approved DERCs used and permanently retired each month shall be equal to the sum of the DERCs required for each month.

#### F.1.c. *Unit Restriction and Annual Emissions Cap*

- i. For the sludge incinerator (EU-S05-1), hot oil furnace (EU-R02-3) and spray dryer scrubber (EU-R02-01) heat inputs, the Permittee shall multiply the rated capacity in MMBtu/h by the hours of operation. For boilers 1, 3 and 4 (EU-S03-1,2 and 3), the Permittee shall calculate the total monthly heat input by allocating the overall fuel use by the individual steam production from each boiler.
- ii. To prevent exceeding the lower of historical actual or allowable emission limits ("historic levels"), actual emissions shall not exceed historic levels as shown below:

The Permittee's Averaging Set NO<sub>x</sub> emissions shall not exceed 54 tons per year, based on the 1990 historic level.

- iii. Approved DERCs may be used to offset emissions above the historic level; however, said DERCs shall be separated from DERCs and/or averaging credits used for meeting emission rate limits specified in Table 22-1, RCSA §22a-174-22. The quantity of DERCs required to offset excess monthly emission above the historic level shall equal the difference between the total emissions (in tons) and the historic level (in tons), plus a 100% premium equal to the difference in DERCs for exceeding the cap.
- iv. For purposes of calculating total emissions, only emissions from sources in the averaging set shall be included; emissions used shall be for a calendar year, based on most recent official emissions test results, beginning in calendar year 1996. Approved DERCs shall be in the Permittee's possession before the historic level is exceeded.

#### F.1.d. Upon issuance of SO 8114A, if the Permittee has reason to believe it may exceed a FLER limit shown in Table III.F.1. above, the Permittee shall conduct NO<sub>x</sub> emissions testing of the corresponding source on or before sixty (60) days after the potential exceedance of the Table III.F.1. limits in accordance with the following:

- i. The Permittee shall submit to the commissioner for his review and written approval an Intent-To-Test ("ITT") protocol not less than thirty (30) days prior to the emissions testing required pursuant to Section III.F.1.d. above (paragraph C.4. of SO 8114A). The ITT protocol shall include at least:
- ii. The Department's Bureau of Air Management Test Form No. 1, "Intent to Test".
- iii. System operating parameters indicative of the highest operating rate since the last previous stack test or the most recent Department witnessed emission test, which ever is most recent, including, but not limited to: steam output rate, temperature and pressure, fuel firing rate and NO<sub>x</sub> emissions rate. The ITT protocol shall provide that the Permittee shall perform testing as specified in RCSA §22a-174-5 and §22a-174-22, including operating the applicable sources at not less than ninety percent (90%) of its maximum rated capacity limit or highest operating rate since its last/previous emissions test, whichever is higher.
- iv. The Permittee shall perform all testing required by SO 8114A in accordance with the approved ITT protocol.
- v. In conducting and performing the testing required by SO 8114A and analyzing the results of such testing, the Permittee shall adhere to methods specified in RCSA §22a-174-5 and §22a-174-22 and as approved by the United States Environmental Protection Agency ("EPA") and the commissioner.
- vi. The Permittee shall schedule all emissions testing so as to allow the commissioner to be present during such testing and to independently verify facility operations, air pollution control equipment parameters and testing procedures.

### Section III: Applicable Requirements and Compliance Demonstration

- vii. Within 30 days after completing any emissions testing required by SO 8114A, the Permittee shall submit to the commissioner a written report providing the results of such testing; within 15 days of a notice from the commissioner indicating deficiencies in such report, the Permittee shall submit a revised report.

F.1.e. The Permittee shall make and keep records of: hours of operation for the sludge incinerator (EU-S05-1), hot oil furnace (EU-R02-3) and spray dryer scrubber (EU-R02-01); heat input for boilers 1, 3 and 4 (EU-S03-1,2 and 3); and NO<sub>x</sub> emissions for each unit in the averaging set on a monthly basis in accordance with Section III.F.1.b. (Paragraph C.2. of SO 8114A) and will maintain records of the averaging credits and debits generated for emission averaging purposes on a monthly basis including fuel type; excess NO<sub>x</sub> emissions; the number of DERCs in its possession, created, purchased and used (by serial number if assigned) each month in accordance with the appropriate emission rates and limits in SO 8114A; the number of DERCs used during the ozone season and non-ozone season (the remainder of the year); as well as documentation attesting to the fact that approved DERCs used during the ozone season were generated during the ozone season. Generator certification of this fact shall be sufficient. The Permittee shall maintain and submit such records to the commissioner in accordance with RCSA §22a-174-22.

F.1.f. *Record Keeping*

The Permittee shall retain records and supporting documentation as described in SO 8114A for a minimum of five (5) years, commencing on the date such records were created. The Permittee shall provide the records specified above to the commissioner within thirty (30) days of receipt of a written request from the commissioner.

F.1.g. *Annual Emission Statement*

No later than March 1, of every year after issuance of SO 8114A, the Permittee shall include with the Annual Emission Statement provided to the commissioner, a record of each sale or other transfer, and use of any and all of the DERCs approved within and subsequent to issuance of SO 8114A until all such DERCs have been used. The Permittee shall also include NO<sub>x</sub> emissions from each of boilers 1, 3 and 4 (EU-S03-1,2 and 3) using or generating DERCs, and the amount of all DERCs used including serial number (if assigned) and approved DERCs generated and/or purchased from other facilities, generated and/or approved for the previous calendar year. These reports shall be on a form prescribed by the commissioner and shall be in monthly increments. Should the Permittee choose to discontinue the generation of DERCs, the Permittee will notify the commissioner upon discontinuance.

F.1.h. *Allowance Use*

Pursuant to RCSA §22a-174-22(d)(3), the Permittee may use NO<sub>x</sub> allowances, through April 30, 2007, pursuant to RCSA §22a-174-22(j) to achieve all or a portion of the reductions required by RCSA §22a-174-22. Any allowance used for compliance with RCSA §22a-174-22(e) shall be subject to all restrictions and/or requirements applicable to DERCs contained in SO 8114A;

- i. In order for the Permittee to use NO<sub>x</sub> allowances, the Permittee shall create a general account in EPA's NO<sub>x</sub> Allowances Tracking System ("NATS"); and
- ii. Each allowance used for compliance with RCSA §22a-174-22 shall be equivalent to one discrete emission reduction credit. Allowances shall be considered used for compliance with RCSA §22a-174-22 when they are transferred from the facility's NO<sub>x</sub> general account in the NATS to the CT State NO<sub>x</sub> Retirement Account (Account ID CT0000000300 in the NATS).

F.1.i. *DERC Doubling*

At a minimum, DERCs required shall be adjusted upwards by 100% if DERCs are not in the Permittee's possession prior to the first day of each month for use. However, based on the gravity of non-compliance, the commissioner may require additional upward adjustment.

### Section III: Applicable Requirements and Compliance Demonstration

#### F.1.j. *Vintage Restrictions*

For the purposes of compliance with RCSA §22a-174-22, DERCS/allowances shall only remain valid for five (5) calendar years from the year of the generation/allocation of such DERCS/allowance. DERCS/allowances older than five (5) calendar years from their creation/allocation are not valid for use for compliance with RCSA §22a-174-22. Notwithstanding the above, DERCS/allowances generated/allocated prior to calendar year 2000 are valid for use for compliance with RCSA §22a-174-22 up to and including December 31, 2004.

#### F.1.k. *FLER Exceedance*

Non-compliance with an established FLER shall subject the Permittee to make restitution by matching the quantity of emissions (“true up”) caused by the exceedance plus a 100% premium. The true up in tons of DERCS shall be equal to the FLER exceedance in #/MMBtu, multiplied by the total heat input during the period of non-compliance divided by 2000 #/ton. If the period of non-compliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date the FLER compliance is achieved as approved by the commissioner shall be used. However, nothing in SO 8114A shall affect the commissioner’s authority to institute any proceeding or take any other action to require additional upward adjustment, based on the gravity of any alleged non-compliance or violation of law.

#### F.1.l. *FLER Modification*

FLERs set forth in Table III.F.1 (Table 1 of SO 8114A) may be modified only after the consent of the commissioner by written modification of SO 8114A.

#### F.1.m. *Emissions Testing*

Pursuant to RCSA §22a-174-22(k), the Permittee shall conduct NO<sub>x</sub> emission tests of the units at least once every five years commencing from the dates of the NO<sub>x</sub> emission tests of the units as provided in Table III.F.1. (Table 1 of SO 8114A).

#### F.1.n. *Extension*

No later than April 30, 2007 for boilers 1, 3 and 4 (EU-S03-1,2 and 3), the Permittee shall comply with the requirements in RCSA §22a-174-22(d)(1). However, after full program review of SO 8114A and other Trading Agreements and Orders and if determined to be appropriate, the commissioner may grant written extension of SO 8114A.

#### F.1.o. *Future Compliance Report*

On or before September 1, 2006, the Permittee shall submit a report indicating how the facility will comply with RCSA §22a-174-22 after April 30, 2007.

#### F.1.p. *Full Compliance*

The Permittee shall not be considered in full compliance with SO 8114A until all actions required by SO 8114A have been completed as approved and to the commissioner’s satisfaction.

#### F.1.q. *Approvals*

The Permittee shall use best efforts to submit to the commissioner all documents required by SO 8114A in a complete and approvable form. If the commissioner notifies the Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the Permittee shall correct the deficiencies and resubmit it within the time specified by

### Section III: Applicable Requirements and Compliance Demonstration

the commissioner or, if no time is specified by the commissioner, within 30 days of the commissioner's notice if deficiencies. In approving any document or other action under SO 8114A, the commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the commissioner deems necessary to carry out the purposes of SO 8114A. Nothing in this paragraph shall excuse non-compliance or delay.

- F.2. The Permittee shall demonstrate compliance with the fuel sulfur limitations in Table III.F. based on, but not limited to, the following requirements.

F.2.a. *Monitoring and Testing Requirements*

- i. Verify fuel sulfur content for each shipment. [RCSA §22a-174-19(a)(5)]
- ii. Fuel analysis for the sulfur content of liquid fuels shall be done according to the most current ASTM Methods D 129 or D 1552. [RCSA §22a-174-5(b)(1)]

F.2.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Fuel merchant certification of the sulfur content for each fuel shipment. [RCSA §22a-174-19(a)(5)]

F.2.c. *Reporting Requirements*

- i. Provide the records specified in Section III.F.2.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### Emissions

- F.3. The Permittee shall demonstrate compliance with NO<sub>x</sub> RACT emission limitations based on, but not limited to, the following requirements.

The Permittee currently complies with the requirements of §22a-172-22 through emission reduction trading as detailed in Sections III.F.1. of this permit.

F.3.a. *Monitoring and Testing Requirements*

- i. Verify emissions using the most recent NO<sub>x</sub> RACT performance test data, monthly fuel monitoring, heat content of fuel and engineering calculations. [RCSA §22a-174-22 and RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall conduct emissions tests at least once every five years. Such tests shall be conducted no later than five years from the date of the last test for the subject unit or no later than five years from the date the last test for the subject unit should have been conducted, whichever is earlier. Compliance with the emission limitations shall be determined based on the average of three (3) one-hour tests, each performed over a consecutive 60-minute period and performed in accordance with §22a-174-5 of the RCSA. [RCSA §22a-174-22(k)(1)]
- iii. Demonstrate compliance with emission limitations of this section using sampling and analytical procedures approved under 40 CFR Part 60, Appendix A, or under procedures in §22a-174-5(d) of the RCSA. Sampling shall be conducted when the source is at normal operating temperature and, unless allowed otherwise by the commissioner in a permit or order, is operating at or above ninety percent (90%) of maximum rated capacity for a fuel-burning source or at or above ninety percent (90%) of design capacity for a waste combustor. Notwithstanding such requirement, any source which has operated in excess of one hundred percent (100%) of its maximum rated capacity at any time since January 1, 1990 shall be tested when the source is operating at or above ninety percent

### Section III: Applicable Requirements and Compliance Demonstration

- (90%) of its highest operating rate since January 1, 1990. [RCSA §22a-174-22(k)(2)]
- iv. Annual emissions shall be verified by adding the current month's emissions to the previous eleven months' emissions. [RCSA §22a-174-33(j)(1)(K)(ii)]

#### F.3.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Records of monthly and annual fuel usage shall be kept. [RCSA §22a-174-33(o)(2)]
- ii. Records of all tune-ups, repairs, replacement of parts and other maintenance. [RCSA §22a-174-22(l)(1)(D)]
- iii. Copies of all documents submitted to the commissioner pursuant to this section. [RCSA §22a-174-22(l)(1)(E)]
- iv. Procedures for calculating NO<sub>x</sub> emission rates. [RCSA §22a-174-22(l)(1)(G)]
- v. Records of the dates and times of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-22(l)(1)(H)]

#### F.3.c. *Reporting Requirements*

- i. Provide the records specified in Section III.F.2.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- ii. Within thirty (30) days of the completion of emission tests, submit a written report of the results of such testing to the commissioner. [RCSA §22a-174-22(l)(2)]
- iii. On or before April 15 of each year, submit a report on NO<sub>x</sub> emissions from the source on forms provided by the commissioner. [RCSA §22a-174-22(l)(6)]

### G. GEU-04, PARTS CLEANERS

Table III.G.: EU-S08-1 Building 15 Parts Cleaner				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	VOC	None	RCSA §22a-174-20(l)(3)	G.1

G.1. The Permittee shall demonstrate compliance for this unit based on, but not limited to, the following requirements:

#### G.1.a. *Work Practice Standards* - [RCSA §22a-174-20(l)(3)]:

- i. Equip the unit with a cover designed to enable easy operation using one hand.
- ii. Equip the cleaning unit with a device for draining cleaned parts constructed internally so that parts are enclosed under the cover while draining. The drainage device may be external for applications where an internal type cannot fit into the cleaning system.
- iii. Store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party in a manner such that greater than 20 percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere.
- iv. Close the cover of the unit whenever parts are not being handled in the cleaner for two (2) minutes or more and when the unit is not in use.
- v. Drain the cleaned parts for at least 15 seconds or until dripping ceases, whichever is longer.
- vi. If used, supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type

### Section III: Applicable Requirements and Compliance Demonstration

- spray) at a pressure which does not exceed ten (10) psi measured at the pump outlet and perform such spraying within the confines of the cold cleaning unit.
- vii. Install one of the following control devices if the solvent vapor pressure is greater than 4.3 kPa (33 mm Hg or 0.6 psi) measured at 38 °C (100 °F) or if the solvent is heated above 50 °C (120 °F):
    - A. Freeboard that gives a freeboard ratio greater than or equal to 0.7; or
    - B. Water cover (solvent must be insoluble in and heavier than water); or
    - C. Other systems of equivalent control, equal to that of a “refrigerated chiller” or carbon adsorption approved by the commissioner by permit or order.
  - viii. Minimize the drafts across the top of the cold cleaning unit such that whenever the cover is open the unit is not exposed to drafts greater than 40 meters per minute, as measured between 1 and 2 meters upwind, and at the same elevation as the tank lip.
  - ix. Do not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired.
  - x. Provide a permanent, conspicuous label on or posted near the unit clearly summarizing the applicable operating requirements.

#### G.1.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Maintain a monthly record of the amount, type and name of solvent used in the unit. [RCSA §22a-174-20(l)(3)(K)]
- ii. Name and address of any person and his or her company to whom waste degreasing solvent is transferred, and the amount of waste degreasing solvent transferred.
- iii. Records showing compliance with G.1.b.viii.

#### G.1.c. *Reporting Requirements*

- i. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.F.
- ii. Provide the records specified in Section III.G.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### H. EU-R02-3, B-06 608 HOT OIL FURNACE #2

Table III.H. EU-R02-3: B-06 608 Hot oil furnace #2				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	Fuel sulfur content	0.3 wt%	CGS 16a-21a §22a-174-19(a)(2)(i)	H.1.

- H.1. The Permittee shall demonstrate compliance with the fuel sulfur limitations in Table III.H. based on, but not limited to, the following requirements.

#### H.1.a. *Monitoring and Testing Requirements*

- i. Verify fuel sulfur content for each shipment. [RCSA §22a-174-19(a)(5)]
- ii. Fuel analysis for the sulfur content of liquid fuels shall be done according to the most current ASTM Methods D 129 or D 1552. [RCSA §22a-174-5(b)(1)]

#### H.1.b. *Record Keeping Requirements*



### Section III: Applicable Requirements and Compliance Demonstration

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Fuel merchant certification of the sulfur content for each fuel shipment. [RCSA §22a-174-19(a)(5)]

#### H.1.c. *Reporting Requirements*

- i. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.E.
- ii. Provide the records specified in Section III.H.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]

### I. GEU-05, 40 CFR 63 SUBPART OOO EUs

Table III.I.: GEU-04, 40 CFR 63 Subpart OOO EUs				
Operating Scenarios Identification	Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
SOS-1	VOC/HAP emissions	See below	40 CFR 63 Subpart OOO	I.1 through I.4

#### EU-R14-5 and 6, Feed Tank 63 and Feed Tank 64

- I.1. The Permittee shall demonstrate compliance based on, but not limited to, the following requirements.

The Permittee shall maintain total uncontrolled HAP emissions from batch non-reactor vents to less than 500 lb/year. [40 CFR 63.1407(a)(1)]

#### EU-R14-3 and -4, Kettles 63, 64 and Condensers

- I.2. The Permittee shall demonstrate compliance based on, but not limited to, the following requirements.

In accordance with 40 CFR §63.1400(k)(4), minimize emissions during startup, shutdown, and malfunction events to the extent practicable.

In accordance with 40 CFR §63.1406(a)(2), reduce total uncontrolled HAP emissions by at least 83 percent, or limit total HAP emissions to less than 0.0000057 lb/lb product for non-solvent based products or 0.0000567 lb/lb product for solvent based products, for each batch produced.

In accordance with 40 CFR §63.1413(a)(4)(i)(C)(2), operate kettle condensers to meet HAP control requirement.

In accordance with 40 CFR §63.6(e)(3), follow the procedures outlined in the Startup, Shutdown, and Malfunction Plan when the condenser and/or its thermocouples are not functioning properly due to one of these events.

#### I.2.a. *Monitoring and Testing Requirements*

- i. Monitor the Kettle 63 and 64 condensers' exit temperatures and verify proper operation of the condensers each day of use. [40 CFR §63.1415(a)(2) and 40 CFR §63.1415(b)(3)]
- ii. Calibrate, maintain, and operate the thermocouples in accordance with manufacturer's specifications or other procedures that provide adequate assurance of monitoring accuracy. 40 CFR §63.1415(a)]

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

#### **I.2.b. *Record Keeping Requirements***

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Record the Kettle 63 and 64 condenser temperatures during kettle use once per day. [40 CFR §63.1415(a)(2)]
- ii. Maintain record of cooling water system design pressure. [40 CFR §63.1416(c)]
- iii. Maintain records of calibration and preventive maintenance work performed on the Kettle 63 and 64 condenser thermocouples. [40 CFR §63.1416(c)]
- iv. A copy of each superceded version of the Startup, Shutdown, and Malfunction Plan must be kept for at least 5 years. [40 CFR §63.6(e)(3)(v)]

#### **I.2.c. *Reporting Requirements***

- i. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.E.
- ii. Provide the records specified in Section III.I.2.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- iii. In the semi-annual report, document the following:
  - A. instances when Kettle 63 or Kettle 64 condensers temperatures are too high to achieve the batch process reactor vent standard. [40 CFR §63.1417(f)(3)(ii)]
  - B. if the mass emission limit is exceeded, include the 12-month rolling average monthly emission rate and the individual monthly emission rate data points making up the 12-month rolling average monthly emission rate. [40 CFR §63.1417(f)(5)]
  - C. instances when the Kettle 63 or Kettle 64 condensers thermocouples were not operating properly, or reliable condenser temperature data were otherwise not recorded while a kettle was operating. 40 CFR §63.1417(f)(3)(i)]
  - D. each revision to the Startup, Shutdown, and Malfunction Plan. [40 CFR §63.6(e)(3)(viii)]
  - E. records of the occurrence and duration of each startup, shutdown, and malfunction operation of process, control, and monitoring equipment resulting in excess emissions shall be reported in the semiannual report. Include for each occurrence whether the procedures specified in the Startup, Shutdown, and Malfunction Plan were followed and documentation of actions not consistent with the plan. [40 CFR §63.1417(g)]

#### **Leak Detection and Repair: Valves, pump seals, connectors, agitator seals, pressure relief devices, sampling connection systems, open-ended valves or lines and closed vent systems**

I.3. The Permittee shall demonstrate compliance based on, but not limited to, the following requirements.

In accordance with 40 CFR §63.1024(a) and §63.983(d)(2), repair each leak detected as soon as practical.

In accordance with 40 CFR §63.1030(b), operate each pressure relief device in HAP service at less than 500 ppm.

In accordance with 40 CFR §63.1033(b), each open-ended valve or line shall be equipped with a cap, blind flange, plug, or second valve.

#### **I.3.a. *Monitoring and Testing Requirements***

- i. Monitor for leaks on a quarterly basis if a valve leaks, or once every 2 years if no valve has leaked for the past three monitoring periods per 40 CFR §63.1025(b)(3)(v) and 40 CFR §63.1025(c)(2). [40 CFR §63.1025(e)(3)]
- ii. Monitor for leaks every 12 months if a connector leaks, or once every 8 years if no connector has leaked during the past monitoring period. [40 CFR §63.1027(b)(3)]
- iii. If a connector is found to be leaking it must be re-monitored within 90 days after repair. [40 CFR

### Section III: Applicable Requirements and Compliance Demonstration

- §63.1027(b)(3)(iv)]
- iv. Test for a leak as soon as practical, within 5 calendar days, of a pressure release from Kettle 63 or Kettle 64, except as provided by §63.1024(d). [40 CFR §63.1030(c)]
- v. Monitor valves in vapor and light liquid service using Method 21 of 40 CFR 60, Appendix A. [40 CFR §63.1023(b)]
- vi. Attempt to repair a leak no later than 5 days after detection, and complete repairs no later than 15 days after detection, except as provided in §63.1024(d) and §63.983(d)(3). [40 CFR §63.1024 and §63.983(d)(2)]
- vii. When the process is operating, visually inspect the agitator seals for Kettle 63 and Kettle 64 for evidence of leaking on weekly basis. [40 CFR §63.1028(c)(3)]
- viii. The requirement to monitor the agitator seals for leaks is not required because of equipment obstruction. [40 CFR §63.1028(e)(6)]
- ix. After each Kettle 63 or Kettle 64 pressure release episode, reseal the rupture disk so that measurement by Method 21 of 40 CFR 60 Appendix A yields a reading of less than 500 ppm. [40 CFR §63.1030]
- x. Each cap, blind flange, plug, or second valve must seal the open end at all times except during operations requiring process flow or during maintenance. [40 CFR §63.1033(b)]

#### I.3.b. *Record Keeping Requirements*

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Record for each detected leak the date of first attempt to repair, the date of successful repair, and the maximum instrument reading at the time the leak is repaired or determined to be nonrepairable. If a repair is delayed beyond 15 days, document the reason and justification for the delay. [40 CFR §63.1024(f)]
- ii. Maintain a record of the monitoring schedule. [40 CFR §63.1025(b)(3)(vi)]
- iii. Document the number of hours the Kettle 63 and Kettle 64 recirculation pumps are in HAP service. [40 CFR §63.1022(b)(5)]
- iv. Document the date of each agitator seal inspection. [40 CFR Per §63.1028(c)(3)(i)]
- v. Record the dates and results of required measurements. [40 CFR §63.1030(c)(3)]
- vi. A list of each open-ended valve or line will be maintained, along with identification of the capping method employed. [40 CFR §63.1038]

#### I.3.c. *Reporting Requirements*

- i. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.E.
- ii. Provide the records specified in Section III.I.3.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)(1)]
- iii. In the semi-annual report, document the following:
  - A. The number of leaks detected, the percent leakers, and the total number of valves monitored. Also report the number of valves not repaired as required by §63.1024, or determined to be nonrepairable pursuant to §63.1025(c)(3), and any delay of repair pursuant to §63.1024(d). [40 CFR §63.1039(b)]
  - B. The number of leaks detected, the percent leakers, and the total number of connectors monitored. Also report the number of connectors not repaired as required by §63.1024, or any delay of repair pursuant to §63.1024(d). [40 CFR §63.1039(b)]
  - C. The number of agitator seal leaks detected. Also report the number of leaking agitator seals not repaired as required by §63.1024, or any delay of repair pursuant to §63.1024(d). [40 CFR §63.1039(b)]
  - D. The results of monitoring required by §63.1030(b) conducted during the semiannual reporting

### Section III: Applicable Requirements and Compliance Demonstration

period. [40 CFR §63.1039(b)(4)]

#### New affected equipment

I.4. The Permittee shall include a description of the new affected equipment and its applicable requirements in the subsequent semi-annual report. [Section VII.E. and 40 CFR §63.1417(f)(4)]

#### J. GEU-06, Emission units subject to 40 CFR 63 Subpart FFFF.

J.1. In accordance with 40 CFR 63 Subpart FFFF, Miscellaneous Organic Chemical Manufacturing (MOCM), for the subject emission units the Permittee shall meet the requirements of the MOCM, including monitoring, reporting and record keeping, by the dates given in the MOCM.

#### K. PREMISES-WIDE GENERAL REQUIREMENTS

Table III.K: PREMISES-WIDE GENERAL REQUIREMENTS			
Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Opacity (stationary sources without CEM)	Less than or equal to 20% opacity during any six-minute block average measured by 40 CFR 60, Appendix, Reference Method 9  Less than or equal to 40% as measured by 40 CFR 60, Appendix, Reference Method 9, reduced to a one-minute block average	RCSA §22a-174-18(b)(1)(A)  RCSA §22a-174-18(b)(1)(B)	K.1
SO <sub>x</sub>	Less than or equal to 1% sulfur by weight (dry basis) in fuel  Less than or equal to 0.3% sulfur by weight (dry basis) in distillate fuel	RCSA §22a-174-19(a)(2)(i)  CGS §16a-21a	K.2
VOC	The Permittee shall comply with the VOC RACT requirements of Order No. 8012.	RCSA §22a-174-20	
Air Pollution Emergency Episode	The Permittee shall comply with RCSA §22a-174-6(c) in case of an emergency episode.	RCSA §22a-174-6	
Air Pollution Control Equipment and Monitoring Equipment Operation	The Permittee shall comply with the requirements of RCSA §22a-174-7 for air pollution control equipment and monitoring equipment operation.	RCSA §22a-174-7	
Prohibition against Concealment/Circumvention	The Permittee shall comply with the prohibition against concealment or circumvention as specified in RCSA §22a-174-11.	RCSA §22a-174-11	
Emission Fees	The Permittee shall pay an emission fee in accordance with RCSA §22a-174-26(d).	RCSA §22a-174-26(d)	
Open Burning	The Permittee is prohibited from conducting open burning, except as may be allowed by CGS RCSA §22a-174(f).	CGS §22a-174(f)	
Severability	Severability shall apply as specified in RCSA §22a-174-15	RCSA §22a-174-15	

K.1. The Permittee shall demonstrate compliance with the opacity limitations set forth in Table III.K. based on, but not limited to, the following requirements:

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

#### **K.1.a. *Monitoring and Testing Requirements***

Upon written request of the commissioner, the Permittee shall verify opacity using Title 40 Code of Federal Regulations Part 60, Method 9.

#### **K.1.b. *Record Keeping Requirements***

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Records of 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(d)]

#### **K.1.c. *Reporting Requirements***

- i. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.F.
- ii. Provide the records specified in Section III.K.1.b. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)]

- K.2. The Permittee shall demonstrate compliance with the SO<sub>x</sub> limitations set forth in Table III.K. based on, but not limited to, the following requirements:

#### **K.2.a. *Record Keeping Requirements***

In accordance with Section VII.F. of this permit, make and maintain the following records for a minimum of five years, commencing on the date such records were created [RCSA §22a-174-33(o)(2)]:

- i. Fuel merchant certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel for each fuel shipment. [RCSA §22a-174-19(a)(5)]
- ii. Shipping receipt from the fuel supplier. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. [RCSA §22a-174-19(a)(5)]

#### **K.2.b. *Reporting Requirements***

- i. Provide written monitoring reports to the commissioner by the 30<sup>th</sup> day following the end of each semi-annual period in accordance with Section VII.F.
- ii. Provide the records specified in Section III.K.2.a. to the commissioner within thirty days of receipt of a written request from the commissioner or such sooner time as the commissioner may require. [RCSA §22a-174-4(d)]

### Section III: Applicable Requirements and Compliance Demonstration

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

This stationary source is subject to the accidental release prevention regulations in 40 CFR Part 68. The Permittee shall comply with the requirements of 40 CFR Part 68, including but not limited to the following:

##### L.1. Develop and implement a management system [40 CFR §68.15]

- a. Assign a qualified person or position that has the overall responsibility for the development, implementation and integration of the risk management program elements.
- b. When responsibility for implementing individual requirements of this part is assigned to persons other than the person identified under Section III.L.1.a. of this permit, the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

##### L.2. Conduct a hazard assessment as provided in 40 CFR §§68.20 through 68.42.

- a. Analyze and report in the Risk Management Plan (RMP) [40 CFR §68.25]:
  - i. One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint provided in Appendix A to 40 CFR Part 68 resulting from an accidental release of regulated toxic substances from covered processes under worst-case conditions defined in 40 CFR §68.22;
  - ii. One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint defined in 40 CFR §68.22(a) resulting from an accidental release of regulated flammable substances from covered processes under worst-case conditions defined in 40 CFR §68.22;
  - iii. Additional worst-case release scenarios for a hazard class if a worst-case release from another covered process affects public receptors different from those potentially affected by the worst-case release scenario developed under paragraphs (i) or (ii) above.
- b. Identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes. [40 CFR §68.28]
- c. Estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 40 CFR §68.22(a). [40 CFR §68.30]
- d. List in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 40 CFR §68.22(a). [40 CFR §68.33]
- e. Review and update the offsite consequence analyses at least once every five years. If changes in processes, quantities stored or handled, or any other aspect of the Cytec Wallingford site might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, complete a revised analysis within six months of the change and submit a revised risk management plan as provided in 40 CFR §68.190. [40 CFR §68.36]
- f. Maintain the following records on the offsite consequence analyses [40 CFR §68.39]:
  - i. For worst-case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection; assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.
  - ii. For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios; assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.

### Section III: Applicable Requirements and Compliance Demonstration

- iii. Documentation of estimated quantity released, release rate, and duration of release.
  - iv. Methodology used to determine distance to endpoints.
  - v. Data used to estimate population and environmental receptors potentially affected.
- g. Include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries or significant property damage on site or known offsite deaths, injuries, evacuations, sheltering in place, property damage or environmental damage. [40 CFR §68.42]
- L.3. Implement the prevention requirements of 40 CFR §§68.65 through 68.87.
- a. At least every five (5) years after the completion of the initial process hazard analysis, the process hazard analysis shall be updated and revalidated to assure that the process hazard analysis is consistent with the current process. [40 CFR §68.67(f)]
  - b. The process hazard analysis shall be performed by a team with expertise in engineering and process operations, and the team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific process hazard analysis methodology being used. Updated and revalidated process hazard analyses completed to comply with 29 CFR §1910.119(e) are acceptable to meet the requirements of this paragraph. [40 CFR §68.67(d)]
  - c. Promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions. [40 CFR §68.67(e)]
  - d. Retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in Section III.M.3.b. above for the life of the process. [40 CFR §63.67(g)]
  - e. Develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information. [40 CFR §63.69(a)]
  - f. Operating procedures shall be readily accessible to employees who work in or maintain a process. [40 CFR §63.69(b)]
  - g. The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. Certify annually that these operating procedures are current and accurate. [40 CFR §63.69(c)]
  - h. Develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees. [40 CFR §63.69(d)]
  - i. Each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in 40 CFR §68.69. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. [40 CFR §63.71(a)]

### Section III: Applicable Requirements and Compliance Demonstration

- j. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. [40 CFR §63.71(b)]
- k. Prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training. [40 CFR §63.71(c)]
- l. Establish and implement written procedures to maintain the on-going integrity of process equipment. [40 CFR §63.73(b)]
- m. Train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner. [40 CFR §63.73(c)]
- n. Perform mechanical integrity inspections and tests of process equipment. Document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test. [40 CFR §63.73(d)]
- o. Correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in 40 CFR §68.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation. [40 CFR §63.73(e)]
- p. In the construction of new plants and equipment, follow the quality assurance procedures listed at 40 CFR §63.73(f).
- q. Establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process. [40 CFR §63.75]
- r. Perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information defined in 40 CFR §68.65. [40 CFR §63.77]
- s. Certify that compliance with the provisions of this subpart have been evaluated at least every three years to verify that procedures and practices developed under this subpart are adequate and are being followed. [40 CFR §63.79]
- t. In accordance with 40 CFR §63.81, investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance. Prepare a report at the conclusion of the investigation that includes the information specified at 40 CFR §63.81(d). In accordance with 40 CFR §63.81(e), establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented.
- u. Provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this rule. [40 CFR §63.83(c)]
- v. In accordance with 40 CFR §63.85(a), issue a hot work permit for hot work operations conducted on or near a covered process. In accordance with 40 CFR §63.85(b), the permit shall document that the fire prevention and protection requirements in 29 CFR §1910.252(a) have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed.
- w. Follow the requirements for work performed by contractors specified at 40 CFR §63.87.



### Section III: Applicable Requirements and Compliance Demonstration

- L.4. Develop and implement an emergency response program as provided in 40 CFR §§68.90 through 68.95. Such program shall include the following elements:
- a. An emergency response plan, which shall be maintained and contain at least the following elements [40 CFR §63.95(a)(1)]:
    - i. Procedures for informing the public and local emergency response agencies about accidental releases;
    - ii. Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and
    - iii. Procedures and measures for emergency response after an accidental release of a regulated substance.
  - b. Develop and implement:
    - i. Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance, in accordance with 40 CFR §63.95(a)(2);
    - ii. Training for all employees in relevant procedures, in accordance with 40 CFR §63.95(a)(3); and
    - iii. Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the Cytec Wallingford site and ensure that employees are informed of changes, in accordance with 40 CFR §63.95(a)(4).
  - c. The emergency response plan shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan. [40 CFR §63.95(c)]
- L.5. Submit a single RMP, as provided in 40 CFR §§68.150 to 68.185.
- a. The RMP shall include a registration that reflects all processes that have a regulated substance present in more than a threshold quantity as determined under 40 CFR §68.115. Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in 40 CFR §68.175. If the same information applies to more than one covered process, the information may be provided only once, but shall indicate to which processes the information applies.
  - b. Review and update the RMP and submit it in the method and format to the central point specified by EPA as of the date of submission. [40 CFR §63.190(a)]
  - c. The RMP shall be revised and updated [40 CFR §63.190(b)]:
    - i. At least once every five years from the date of its initial submission or most recent update required by paragraphs (ii) through (vii) below, whichever is later. For purposes of determining the date of initial submissions, RMPs submitted before June 21, 1999 are considered to have been submitted on that date.
    - ii. No later than three years after a newly regulated substance is first listed by EPA;
    - iii. No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;
    - iv. No later than the date on which a regulated substance is first present above a threshold quantity in a new process;
    - v. Within six months of a change that requires a revised PHA or hazard review;
    - vi. Within six months of a change that requires a revised offsite consequence analysis as provided in §68.36;
    - vii. Within six months of a change that alters the Program level that applied to any covered process.

### Section III: Applicable Requirements and Compliance Demonstration

- d. For any accidental release meeting the five-year accident history reporting criteria of 40 CFR §68.42 and occurring after April 9, 2004, submit the data required under 40 CFR §§68.168, 68.170(j), and 68.175(l) with respect to that accident within six months of the release or by the time the RMP is updated under 40 CFR §68.190, whichever is earlier. [40 CFR §63.195(a)]
- e. Beginning June 21, 2004, within one month of any change in the emergency contact information required in accordance with 40 CFR §68.160(b)(6), submit a correction of that information. [40 CFR §63.195(b)]

#### M. ASBESTOS REQUIREMENTS

Should this stationary source, as defined in 40 CFR §61.145, become subject to the national emission standard for asbestos regulations in subpart M of 40 CFR Part 61 when conducting any renovation or demolition at this premises, then the owner or operator shall submit proper notification as described in 40 CFR §61.145(b) and shall comply with all other applicable requirements of including but not limited to subpart M.

#### N. EMISSION LIMITATIONS

For the purposes of determining New Source Review applicability, in accordance with RCSA §22a-174-3a, for a new emission unit connected to an existing control device, the Permittee may calculate potential emissions of the new emission unit using the control efficiency of the existing control device. The new emission unit shall be subject to the monitoring, record keeping and reporting requirements of the emission unit(s) currently utilizing the existing control device.

#### O. BATCH PROCESSES ACT REQUIREMENTS

With the exception of the process vents required to achieve 85% control in accordance with VOC RACT, all process vents will be controlled, as necessary, according to the criteria specified in the Batch Processes ACT information document. The Batch Processes ACT specifies control of VOC emissions from batch process vents in the organic chemicals industry.

The Batch Process ACT recommends the reduction of VOC emissions by 90 percent for individual vents, or for vent streams in aggregate, within a batch process, having an actual average flow rate below the maximum cost effective flow rate (FR) as calculated according to the following formulas:

$$\begin{aligned} \text{FR} &= 0.07(\text{AE}) - 1,821 \quad (\text{where vapor pressure} \leq 75 \text{ mm Hg}) \\ &= 0.031(\text{AE}) - 494 \quad (75 \text{ mm Hg} < \text{vapor pressure} < 150 \text{ mm Hg}) \\ &= 0.013(\text{AE}) - 301 \quad (\text{vapor pressure} \geq 150 \text{ mm Hg}) \end{aligned}$$

where :      FR = the maximum flow rate at which control is cost effective (scfm)  
              AE = annual mass emissions total (lb/yr)

Currently, none of the emissions units contain batch process vents that, individually or in aggregate, meet the cost effectiveness criteria specified by the Batch Processes ACT. This determination shall be reevaluated each year based on the prior year's actual VOC emissions. Any batch process vents that, individually or in aggregate, meet the cost effectiveness criteria specified by the Batch Processes ACT will be controlled to achieve at least a 90% reduction of VOC emissions. A list of subject sources shall be annually updated and maintained by the Permittee based on records of emission rate and flow rate data.

Section IV: Compliance Schedule

NOT APPLICABLE

Table IV: COMPLIANCE SCHEDULE				
Emission Unit	Applicable Regulations	Steps required for achieving compliance (Milestones)	Date by which each step is to be completed	Dates for monitoring, record keeping, and reporting
n/a	n/a	n/a	n/a	n/a

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

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

- A.** This 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 Environmental Protection or any federal, local or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this 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 beyond the property boundary of the premises as set forth in RCSA Section 22a-174-23.
- D.** Noise: The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA Section 22a-69-1 through 22a-69-7.4, inclusive.
- E.** Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA Section 22a-174-29.
- F.** Open Burning: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS Section 22a-174(f).
- G.** Fuel Sulfur Content: The Permittee shall not use #2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS Section 16a-21a.
- H.** Climate Change: In accordance with Public Act No. 04-252 Sec. 3 paragraph (b), not later than April 15, 2006, and annually thereafter, the owner or operator of any facility that is required to report air emissions data to the Department of Environmental Protection pursuant to Title V of the federal Clean Air Act and that has stationary emissions sources that emit greenhouse gases shall report to the regional registry direct stack emissions of greenhouse gases from such sources. The owner or operator shall report all greenhouse gas emissions in a type and format that the regional registry can accommodate.

**Section VI: Permit Shield**

**NO PERMIT SHIELDS HAVE BEEN GRANTED**

Table VI: PERMIT SHIELD				
Regulated Pollutants	Emissions Units	Applicable Requirement or Non-Applicable Requirement Descriptions	Applicable Regulatory References/ Citations	*Applicability
N/A				

**\*For “Applicability”, use AR to indicate Applicable Requirement and NR for Non- Applicable Requirement**

## **Section VII: Title V Requirements**

The Administrator of the United States Environmental Protection Agency and the commissioner of 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 permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this 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 permit, the word "day" means calendar day. Any document or action which is required by this 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 permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of the Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the U.S. 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; US EPA, Region 1; One Congress Street; Suite 1100 (SEA); Boston, MA 02114-2023.

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

In accordance with Section 22a-174-33(b) of the RCSA, 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 Section 22a-174-2a(a) of the RCSA, or by a duly authorized representative of such individual. Any individual signing any document pursuant to Section 22a-174-33(b) of the RCSA 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 Section 22a-174-2a(a)(5) of the RCSA:

“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)]**

If an authorization pursuant to Section 22a-174-2a(a) of the RCSA is no longer effective because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of Section 22a-174-2a(a)(2) of the RCSA shall be submitted to the commissioner prior to or together with the submission of any applications, reports, forms, compliance certifications, documents or other information which is signed by an individual or a duly authorized representative of such individual pursuant to Section 22a-174-2a(a)(2) of the RCSA.

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

The Permittee shall submit additional information in writing, at the commissioner's request, within thirty (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 the permit or to determine compliance with the permit.

## **Section VII: Title V Requirements**

In addition, within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this 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 permit, shall submit to the commissioner, on forms prescribed by the commissioner, written monitoring reports on January 30 and July 30 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.

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

Unless otherwise required by this permit, the Permittee shall make and keep records of all required monitoring data and supporting information for at least five (5) 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 January 30 and July 30 of each year, or on a more frequent schedule if specified in this permit, submit to the commissioner a progress report on forms prescribed by the commissioner, and certified in accordance with Section 22a-174-2a(a)(5) of the RCSA. Such report shall describe the Permittee's progress in achieving compliance under the compliance plan schedule contained in this permit. Such progress report shall:

## **Section VII: Title V Requirements**

1. Identify those obligations under the compliance plan schedule in the 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 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 Section 22a-174-33(q)(1) of the RCSA shall be simultaneously submitted by the Permittee to the Administrator.

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

The Permittee shall, on January 30 of each year, or on a more frequent schedule if specified in this permit, submit to the commissioner, a written compliance certification certified in accordance with Section 22a-174-2a(a)(5) of the RCSA and which includes the information identified in Title 40 CFR 70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to Section 22a-174-33(q)(2) of the RCSA 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 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 twenty-four (24) hours after such deviation commenced; and
2. For any other regulated air pollutant, no later than ten (10) days after such deviation commenced.

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

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

### **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 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 permit shall not be deemed to:

1. preclude the creation or use of emission reduction credits or the trading of such credits in accordance with Sections 22a-174-33(j)(1)(I) and 22a-174-33(j)(1)(P) of the RCSA, 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 under 40 CFR Part 72;
3. authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or



## **Section VII: Title V Requirements**

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

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

The commissioner may, for the purpose of determining compliance with the permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under the 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 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 Operating Permit.

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

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the remainder of this 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 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 permit.

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

This permit does not convey any property rights or any exclusive privileges. This 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 Section 4-181a(b) of the Connecticut General Statutes and Section 22a-3a-5(b) of the RCSA. This permit shall neither create nor affect any rights of persons who are not parties to this permit.

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

The Permittee shall, contemporaneously with making a change authorized by this 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 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 72 to 78, inclusive, or
4. constitute a non-minor permit modification pursuant to Section 22a-174-2a(d)(4) of the RCSA.

At least seven (7) days before initiating an action specified in Section 22a-174-33(r)(2)(A) of the RCSA, 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 Section 22a-174-33(r)(2)(A) of the RCSA 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 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 permit unless this permit has been transferred to another person in accordance with Section 22a-174-2a(g) of the RCSA.

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 Section 22a-6m.

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

The commissioner may revoke this permit on his own initiative or on the request of the Permittee or any other person, in accordance with Section 4-182c of the Connecticut General Statutes, Section 22a-3a-5(d) of the RCSA, 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 permit shall state the requested date of revocation and provide the commissioner with satisfactory evidence that the emissions authorized by this permit have been permanently eliminated.

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

This permit may be modified, revoked, reopened, reissued, or suspended by the commissioner, or the Administrator in accordance with Section 22a-174-33(r) of the RCSA, Connecticut General Statutes Section 22a-174c, or Section 22a-3a-5(d) of the RCSA.

## **Section VII: Title V Requirements**

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

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

### **Y. CREDIBLE EVIDENCE**

Notwithstanding any other provision of this 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 permit shall preclude the use, including the exclusive use, of any credible evidence or information.